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2022 PTAB YEAR IN REVIEW

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Introduction



Wilson Sonsini Goodrich & Rosati is pleased to present our 2022 PTAB Year in Review.

We begin with a review of 2022 petition filings and outcomes at the Patent Trial and Appeal Board (PTAB), and examine the effect of the decrease in discretionary denials on case institutions.

We then provide a summary of notable developments at the PTAB, including recent precedential and director review decisions.

We then explore important appellate decisions relating to PTAB trials.

Finally, we provide an analysis of PTAB merits rationales for denying institution.

We hope you find our *2022 PTAB Year in Review* to be a useful resource for insight on the most meaningful developments from the past year. As always, should you have any questions or comments on any of the matters discussed in this report, please contact a member of the firm's post-grant practice or your regular Wilson Sonsini attorney.

PTAB Filings and Outcomes

Patents challenged and substantive institution rates at the PTAB for FY22 were generally consistent with trends observed since 2018, though a reduction in discretionary denials of institution resulted in an increase in the nominal institution rate. Below is a brief elaboration about these developments.

2022 AIA Post-Grant Proceedings Filing and Institution Rates

Over the past five PTAB fiscal years (from October through September), the number of petitions has dropped while the number of patents challenged has been flat. Thus, the reduction in the number of petitions may be attributed to a decrease in parallel and/or serial challenges to patents. Institution rates were steady between FY17 and FY21, hovering at or around 60 percent. However, to date, the institution rate for FY22 petitions is significantly higher (70 percent) at the expense of discretionary denials.¹

In past years, the frequency of discretionary denials such as those

	Petitions	Patents Challenged	Institution Rate	Denial of Institution	
				Merits	Discretion
FY17	1,904	1,295	61%	25%	13%
FY18	1,614	1,146	60%	26%	14%
FY19	1,467	1,048	57%	23%	19%
FY20	1,514	1,194	59%	21%	20%
FY21	1,403	1,136	58%	25%	17%
FY22 ¹	1,367	1,108	70%	24%	6% (n=51)

related to parallel district court litigation (*Fintiv*), serial challenges (*General Plastic*), and repeating arguments and evidence previously considered by the U.S. Patent and Trade Office (USPTO) (*Advanced Bionics*) have rivaled the frequency of merits-based denials. In FY22, the PTAB dramatically curtailed the use of discretionary denials. To date, there have been only 12 denials under *Fintiv*, five denials under *General Plastic*, and eight denials under *Advanced Bionics*.

Institution rates for the various technology centers remained variable in FY22, with rates ranging from 46 percent to 82 percent. Computer architecture, communications, and mechanical engineering technology centers have experienced large increases in institution rates—up 29 percent, 17 percent, and 17 percent, respectively. The remaining technical centers had institution rates more similar to FY21. Chemistry has long been the most difficult center to gain institution, and remained so in FY22 with an institution rate of 46 percent.

Looking now to Final Written Decisions resulting from FY21 petitions as compared to those filed in the prior two fiscal years, the percentage of decisions upholding all claims and those finding all claims unpatentable both ticked up slightly to 21 percent and 64 percent, respectfully. Accordingly, mixed decisions decreased to 15 percent. In keeping with past trends, successful motions to amend were obtained in only a very small percentage of cases.

	FY20		FY21		FY22	
Tech Center	Total Petitions	Institution Rate	Total Petitions	Institution Rate	Total Petitions	Institution Rate
1600 – Biotechnology	78	57%	99	69%	96	67%
1700 – Chemical and Material Engineering	98	47%	79	53%	53	46%
2100 – Computer Architecture	124	67%	190	53%	168	82%
2400 – Computer Networks	181	58%	254	53%	244	66%
2600 – Communications	342	59%	232	55%	259	72%
2800 – Semiconductors	264	66%	208	67%	212	73%
3600 – Transportation	176	55%	142	63%	143	61%
3700 – Mechanical Engineering	210	58%	176	55%	172	72%
Miscellaneous	41		24		21	-

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	FY19 (n=461)	FY20 (n=449)	FY21 (n=310)
All claims upheld	20%	18%	21%
All claims unpatentable	60%	61%	64%
Mixed	20%	20%	15%
Amended claims	<1%	1%	<1%

Notable Developments at the PTAB

The USPTO received a new director when Katherine Vidal was sworn in on April 13, 2022.² Since that time, the PTAB has issued five precedential decisions, all authored by Director Vidal and designated as precedential simultaneously or nearly simultaneously with the issuance of the decision. A brief summary of each decision is included below, followed by a brief discussion of the inventory of director review and Precedential Opinion Panel (POP) requests.

PTAB Precedential Decisions

In *Code200, UAB v. Bright Data, Ltd.*,³ Director Vidal granted *sua sponte* review of two decisions denying institution and held that the *General Plastic* factors did not warrant denial of institution when the first-filed petition was not evaluated on the merits. We discussed this case in further detail in the <u>October 2022 Issue</u> of *The PTAB Review*.

In *NXP USA, Inc. v. Inpinj, Inc.*,⁴ Director Vidal granted *sua sponte* review and then affirmed the panel decision that a postdecision *Fintiv* stipulation provided no basis for rehearing.

In OpenSky Industries, LLC v. VLSI Technology LLC⁵ and in Patent Quality Assurance, LLC v. VLSI Technology LLC,⁶ Director Vidal granted *sua sponte* review of the institution decisions, held that the original petitioners' conduct was an abuse of the *inter partes* review (IPR) process and sanctioned them, placed a joinder petitioner in control of the petitioner filings in each proceeding, and determined (or remanded for determination) that the petition at the time of institution presented a compelling, meritorious challenge. A more detailed discussion of these sanctions may be found below

and in the <u>October 2022 Issue</u> of *The PTAB Review*. Finally, in *Apple Inc. v. Zipit wireless*, *Inc. 7* Director Vidal granted sug spor

Inc.,⁷ Director Vidal granted *sua sponte* review, vacated adverse judgments, and remanded to determine whether the patent owner had really abandoned the contest and, if not, to issue a final written decision addressing the patentability of each challenged claim.

Director Review and POP Inventory

In contrast to the spate of precedential decisions designated as a result of sua sponte director review of institution decisions, the PTAB designated only one additional case as precedential in 2022. In Toshiba America Electronic Components, Inc. v. Monument Peak *Venture*, *LLC*,⁸ the PTAB's precedential opinion panel (POP) issued a precedential decision holding that a Fedwire confirmation provided sufficient evidence supporting payment of petition filing fees. This was only the third POP decision issued since inception of the POP in September 2018.9 As shown in the table below, no additional POP decisions have issued since. Nor have any POP requests been granted.

Precedential Opinion Panel Requests					
	Denied	Dismissed/ Withdrawn	Granted	Pending	
FY22	49	7	0	8	
FY2310	6	0	0	24	

In contrast to POP review, director review requests have been much more likely to receive action, though the action is generally not positive for the requester. As shown in the table below, the vast majority of director review requests are denied.

Director Reviews					
	Denied	Dismissed/ Withdrawn	Granted	Pending	
FY22	127	13	5	0	
FY2311	0	0	8	14	

We summarized several of the decisions where director review was granted in our <u>October 2022 Issue</u> of *The PTAB Review*. A further update on two director review cases is provided below.

VLSI Update

As we noted in our <u>October 2022 Issue</u> of *The PTAB Review*, the director granted *sua sponte* review of two decisions granting institution of petitions brought by OpenSky Industries, LLC and Patent Quality Assurance, LLC, against patents owned by VLSI Technology LLC.¹² Since then, the director has continued to play an active role in the proceedings.

In a decision dated October 4, 2022, the director determined that OpenSky had abused the IPR process by filing an IPR in an attempt to extract payment from VLSI or from joinder petitioner Intel Corporation.¹³ The director then sanctioned OpenSky by precluding it from actively participating in the proceeding and by elevating joinder petitioner Intel to become the lead petitioner.¹⁴ The director also ordered OpenSky to show cause why it should not be ordered to pay compensatory

> damages to VLSI. The director also ordered a remand to the board to reassess the evidence presented before it at the institution stage

and determine whether that evidence demonstrated "compelling merits" to warrant institution.¹⁵

On remand, the board found that the petition had presented a "compelling, meritorious challenge."¹⁶ In particular, the board found the petition and supporting evidence "would plainly lead to a conclusion that one or more challenged claims are unpatentable" and the pre-institution record supported a finding that "it was highly likely that Petitioner would prevail with respect to at least one challenged claim."¹⁷

In the interim, Patent Owner VLSI requested reconsideration of the director's decision to remand to the board. VLSI argued that termination of the proceeding was the only appropriate sanction, rather than allowing a timebarred petitioner who was subject to a district court judgement of infringement on the challenged patent to remain as lead petitioner.¹⁸ The director denied VLSI's request, finding that the remand ordering an evaluation of the petition for "compelling merits" based on the institution-stage record "struck the appropriate balance" between "the unique dynamics of the case" and "the public interest in evaluating patent challenges with compelling merits."19 Nevertheless, in a separate paper, the director ordered sua sponte review of the board's "compelling merits" decision, noting she "fe[lt] duty-bound to conduct an independent Director review of the compelling merits determination based on the unusual and complex nature of this case."20 The director also authorized the parties to brief the board's remand decision on compelling merits in the form of a rehearing request.²¹

Following the parties' briefing, the director issued a decision affirming the board's decision on remand.²² At the outset of the decision, the director, "[n]ow having the benefit of additional time to consider this case," concluded

that "the best course of action" was "to dismiss OpenSky from this case to ensure that OpenSky does not benefit from its abuse of the IPR process."²³ The director also ordered VLSI to show cause in its rehearing request why it should not be ordered to pay Intel reasonable attorney fees for presenting "misleading statements of law and fact in contravention of their obligations under 37 C.F.R. § 11.303 (Candor Toward the Tribunal)."²⁴

On the same day as her decision affirming the board's compelling merits decision, the director also issued her decision on director review of the institution decision involving petitioner Patent Quality Assurance (PQA).25 In that proceeding, the director determined that PQA had engaged in discovery misconduct by failing to comply with her order for interrogatories and mandated discovery, advanced a misleading argument and a misrepresentation of fact regarding the exclusive engagement of an expert witness relied upon by OpenSky in a parallel proceeding, and abused the IPR process by filing its petition in an attempt to extract payment from VLSI.26 The director based her finding of IPR process abuse on adverse inferences drawn from PQA's failure to comply with the discovery order. As a result of these findings, the director dismissed PQA from the proceeding and ordered PQA to show cause why it should not be ordered to pay compensatory damages to VLSI.27 Lastly, the director determined that the record before the board prior to institution presented a compelling, meritorious challenge to support institution and permitted the IPR to continue.28

With the oral hearing already concluded, final written decisions are expected to issue in the near future. Briefing as to the sanctionable conduct noted by the director is also ongoing.

Appellate Review of AIA Post-Grant Proceedings

Notable U.S. Supreme Court Cases

After an eventful 2021, in which the Supreme Court addressed administrative patent judge constitutionality²⁹ and patent assignor estoppel,30 the Court took a break in 2022. Since October 2022, the Court's 2023 term has been marked mainly by the cases it has turned away. While the Court granted certiorari in *Amgen v. Sanofi*³¹ to determine whether the Federal Circuit has adopted an unduly restrictive approach (requiring support for the full scope of the claim) to the statutory requirement to provide a disclosure that enables making and using the claimed invention,³² the Court declined to review whether the Federal Circuit had adopted a similar approach to the related written-description requirement of the same statute in Juno Therapeutics v. Kite Pharma.³³ The Court also declined review of subject-matter eligibility in American Axle v. Neapco,34 which presented the question in a mechanical context rather than in the life-science or computer-related contexts, where the Court's decisions over the last 15 years have caused some confusion. The U.S. government's views have been requested in two additional eligibility cases—both computer-related³⁵—and, if granted, might offer some additional insight into the test for patent eligible subject matter. None of these issues is specific to PTAB reviews, although these issues could arise in, for example, post-grant reviews, priority challenges, and amended claims. The Court is considering whether to grant certiorari in Apple v. California Institute of *Technology*,³⁶ a case involving the scope of IPR estoppel, and has requested the views of the federal government.

Notable Federal Circuit Cases

Appointment Constitutionality

The Supreme Court held administrative patent judge appointments unconstitutional in United States v. Arthrex,³⁷ but severed a statutory provision to ensure director control over final PTAB decisions, thus eliminating the constitutional defect. On remand, the final written decision was under the control of the patent commissioner while the director's position was vacant. In a new appeal, Arthrex v. Smith & *Nephew*,³⁸ Arthrex argued that the patent commissioner could not fill the director's role for constitutional purposes. The Federal Circuit disagreed, holding that the patent commissioner could act on the absent director's behalf. Arthrex has again petitioned for certiorari.39

Patentability Issues

Admitted prior art: In *Qualcomm Inc. v. Apple Inc.*, the Federal Circuit clarified how "admitted prior art" may be used in IPRs.⁴⁰ Despite the confusing name, the key term is "admitted," not "prior art." Hence, admitted prior art may not be used as the basis for an IPR petition.⁴¹ However, as a party admission, it can provide evidence regarding the scope and content of the art or the level of skill in the art.

Claim construction: In *VLSI Technology v. Intel*,⁴² the Federal Circuit reviewed PTAB claim construction with mixed results. The PTAB reviewed claim language that a district court had already construed. The court found no error in the PTAB's failure to cite the district court's construction because the record showed the PTAB was aware of the construction and had adopted a construction "not inconsistent" with the district-court construction. Significantly, the court also found no error when the PTAB expanded on the construction to address a question before the PTAB that had not been resolved in the district court's construction. The PTAB erred, however, in broadly construing the phrase "used for" in a negative limitation as broadly covering any configuration without the use excluded by the negative limitation. The court explained that "used for" requires determining an actual use, not simply how the element is not used.

Procedural Issues

Substitute claims: In American National Manufacturing v. Sleep *Number*,⁴³ the court addressed the scope of permissible amendments in IPR. A patent owner may move for a reasonable number of substitute claims, provided the amendments do not enlarge the scope of the original claims or introduce new matter.44 By rule, the amendment must also respond to a ground of unpatentability.⁴⁵ The patent owner had offered substitute claims that responded to the grounds of unpatentability but also made changes that were not responsive to any ground. The PTAB permitted the amendment and the petitioner appealed, arguing that amendments beyond the scope of the grounds created due process issues. The Federal Circuit affirmed, however, explaining that amended claims can be challenged on any basis, including patentability issues that could not be raised in the petition (such as indefiniteness), making a broader scope of amendment necessary.

Disclaimer: In *Cupp Computing v. Trend Micro*,⁴⁶ the patent owner argued that its narrowing construction during an IPR should count as a disavowal limiting the permissible scope of construction. The Federal Circuit rejected this argument, explaining that a disavowal can affect *subsequent* proceedings, but is no substitute for amendment in the *current* proceeding. The court explained that precedent applying disavowals, even in IPRs, always applied the disavowal in a different proceeding, not in the proceeding where the disavowal was made.

Estoppel on appeal: In Google v. Hammond Development International,47 the petitioner appealed from a decision that some of the challenged claims were not shown to be unpatentable. On appeal, Google argued that the PTAB decision rested on a determination that was inconsistent with final decisions in related cases on the same issue, while Hammond argued Google forfeited the issue. The Federal Circuit explained that Google could not have raised collateral estoppel in its petition because the decisions creating the estoppel did not exist when the petition was filed. The court agreed to apply estoppel to the claim directly affected and to a claim that Hammond agreed was not separately patentable, but declined to apply estoppel to the remaining claims.

Update on Merits Bases for Institution Denials

As discussed above, the institution rate for post-grant proceedings shifted significantly in FY22, with a sharp decrease in discretionary denials relative to previous years. In keeping with this trend, the USPTO provided new guidance toward the end of FY22 impacting the USPTO's stance toward discretionary denial. This guidance included the *Fintiv* memo,⁴⁸ which cut back significantly on discretionary denial based on co-pending litigation, as well as the precedential director review decision in *Bright Data*⁴⁹ emphasizing the importance of allowing petitioners the opportunity to pursue a decision on the merits.

However, the deemphasis of discretionary denial is not the only noticeable change to the board's institution statistics this year—a small trend has also arisen regarding the bases of certain merits-based denials. Below is a brief description of the trends in the board's rationale for merits-based denials of obviousness cases during FY22 and the first quarter of FY23.

When the board denies an obviousness challenge on the merits, we can categorize the decision into one of three broad categories.

A first category for denial is a failure of the prior art to teach or suggest an element of the independent claims. An example of such a "missing element" denial is found in *Lumenis BE Ltd. v. BTL Healthcare Technologies A.S.*⁵⁰ The petitioner alleged obviousness of a claim directed to a muscle treatment using time-varying magnetic fields from electromagnetic coils disposed near a patient. The board found that the references cited in two obviousness grounds failed to teach a recited step of cooling the coils and a recited step of charging energy storage devices.

A second category for denial is a failure by the petitioner to substantiate a rationale to combine (or otherwise modify) prior art references.⁵¹ An example of such a "rationale" denial is Markforged Inc. v. Continuous Composites, Inc., which involved patent claims directed to methods for 3D printing objects.52 The petitioner proposed combining a publication disclosing methods for manufacturing complex fiber-reinforced products with a patent disclosing a rapid prototyping apparatus. The board denied institution because it found that, while the petition had identified benefits of the rapid prototyping apparatus, it had failed to explain why these benefits would have led a person of ordinary skill in the art

to combine the references in the specific manner claimed.

The third category for denial includes all other miscellaneous merits bases. The most common reason for denial in this category was a failure to show that a reference was prior art to the challenged patent. An example of such a case is PNC Bank v. United Services Automobile Association, which involved claims to a system for depositing checks via a mobile device.53 The petitioner's obviousness case relied on showing that a priority application of the challenged patent lacked written description for certain claim limitations involving a mobile device with a camera and checking for errors prior to submitting a scan of a check. The board disagreed, finding that petitioner had failed to show a lack of written description for either element, so the challenge failed because the applied art was not prior art. This third category represents only a small fraction of all categorized cases, accounting for about 10 percent of cases during the analyzed time period with no significant change from quarter to quarter.

We sorted each merits denial of institution of obviousness grounds from October 1, 2021, to December 31, 2022, into these three categories.54 The figure below illustrates the fraction of these decisions that rejected the petitioner's proposed rationale to combine. Based on this 15-month data set, we observed a recent trend favoring denial of institution based on rationale to combine. In particular, there is a significant shift in the basis of decision in the last two quarters (Q4 of FY22 and Q1 of FY23) relative to the prior three quarters. Averaging over these time periods, the rate of denial based on insufficient rationale increased from 34 percent in the first three quarters to 48 percent in the last two quarters, a 14 percentage-point shift.

These data suggest a trend toward increasing scrutiny of the petitioners' proposed motivations to combine for obviousness grounds. Nevertheless, given the relatively short timeframe, it remains to be seen whether this shift will persist in future board decisions.



Fraction of Rationale-Based §103 Denials

About Wilson Sonsini's Post-Grant Practice

The professionals in Wilson Sonsini Goodrich & Rosati's post-grant practice are uniquely suited to navigate the complex trial proceedings at the USPTO as well as on appeal at the Federal Circuit. We have extensive experience before the PTAB, representing clients in numerous AIA trial proceedings and in countless reexaminations and patent interference trials. Our practice includes professionals with decades of experience at the PTAB, including former PTAB judges. Our core team leverages firmwide intellectual property expertise to provide comprehensive IP solutions for clients that cover strategy, prosecution, licensing, enforcement, and defense.

Endnotes

- 1 PTAB institution data in this article was obtained using Lex Machina and includes discretionary denials of institution. FY22 numbers reflect institution decisions entered on or before December 28, 2022.
- 2 https://www.uspto.gov/about-us/news-updates/uspto-welcomes-new-director-kathi-vidal.
- 3 IPR2022-00861, -00862, Paper 18 (Aug. 23, 2022).
- 4 IPR2021-01556, Paper 13 (Sep. 7, 2022).
- 5 IPR2021-01064, Paper 102 (Oct. 4, 2022).
- 6 IPR2021-01229, Paper 102 (Dec. 22, 2022).
- 7 IPR2021-01124, Paper 14 (Dec. 21, 2022) (designated Jan. 4, 2023).
- 8 IPR2021-00330, Paper 20 (Jan. 20, 2022).
- 9 *Id.*; *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 (Dec. 20, 2019) (Paper 29) (addressing printed publication prior art); *Hunting Titan, Inc. v. DynaEnergetics Europe GmbH*, IPR2018-00600, Paper 67 (July 6, 2020) (addressing PTAB-raised grounds against substitute claims in motions to amend).
- 10 As of December 15, 2022 according to Lex Machina.
- 11 As of December 15, 2022, according to the USPTO website. *See* https://www.uspto.gov/patents/ptab/status-precedential-opinion-panel-requests and https://www.uspto.gov/patents/patent-trial-and-appeal-board/status-director-review-requests.
- 12 OpenSky Indus., LLC v. VLSI Tech. LLC, IPR2021-01064, Paper 41 (June 7, 2022); Patent Quality Assurance, LLC v. VLSI Tech. LLC, IPR2021-01229, Paper 31 (June 7, 2022).
- 13 OpenSky Indus., LLC v. VLSI Tech. LLC, IPR2021-01064, Paper 102, 3 (Oct. 4, 2022).
- 14 *Id*. at 47.
- 15 *Id.* at 5.
- 16 *Id.*, Paper 107, 11 (Oct. 14, 2022).
- 17 Id.
- 18 Id., Paper 106, 1-2 (Oct. 13, 2022).
- 19 Id., Paper 114, 4-5 (Nov. 4, 2022).
- 20 Id., Paper 108, 6 (Oct. 17, 2022).
- 21 *Id.* at 7.
- 22 *Id.*, Paper 121, 1 (Dec. 22, 2022).
- 23 *Id.* at 2-3.
- 24 Id. at 3-4.
- 25 Patent Quality Assurance, LLC v. VLSI Tech. LLC, IPR2021-01229, Paper 102 (Dec. 22, 2022).
- 26 Id. at 2-4.
- 27 *Id.* at 5.
- 28 Id. at 5-6.
- 29 United States v. Arthrex, 594 U.S. ____, 141 S.Ct. 1970 (2021) (holding administrative patent judge appointments unconstitutional and severing the unconstitutional provision to enhance director control).
- 30 Minerva Surgical v. Hologic, 594 U.S. ___, 141 S.Ct. 2298 (2021) (reaffirming but limiting scope of assignor estoppel).
- 31 No. 21-757 (cert. granted Nov. 4, 2022).
- 32 35 U.S.C. §112(a).
- 33 No. 21-1566 (cert. denied Nov. 7, 2022).
- 34 No. 20-891 (cert. denied June 30, 2022).
- 35 Interactive Wearables v. Polar Electro, No. 21-1281 (views requested Oct. 3, 2022); Tropp v. Travel Sentry, No. 22-22 (views requested Oct. 17, 2022).
- 36 No. 22-203 (conf. Jan. 13, 2023).
- 37 594 U.S. ___, 141 S.Ct. 1970 (2021).
- 38 35 F.4th 1328, 1333 (Fed. Cir. 2022).
- 39 No. 22-639 (petition filed Jan. 6, 2023).
- 40 24 F.4th 1367 (Fed. Cir. 2022).
- 41 35 U.S.C. §311(b) (requiring "prior art consisting of patents or printed publications").
- 42 No. 2021-1826 (Fed. Cir., Nov. 15, 2022).
- 43 52 F.4th 1371 (Fed. Cir. 2022).
- 44 35 U.S.C. §316(d).
- 45 37 C.F.R. §42.121(a)(2)(i).
- 46 53 F.4th 1376 (Fed. Cir. 2022).
- 47 54 F.4th 1377 (Fed. Cir. 2022).
- 48 Katherine K. Vidal, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022).
- 49 Code 200, UAB v. Bright Data Ltd., IPR2022-00861, Paper 18 (Aug. 23, 2022) (precedential).
- 50 IPR2021-01276, Paper 8 (Mar. 4, 2022).
- 51 This category includes failures to show either a sufficient rationale, a reasonable expectation of success, or both.
- 52 IPR2022-00652, Paper 8 (Sep. 9, 2022).
- 53 IPR2021-01071, Paper 21 (Jan. 20, 2022).
- 54 PTAB institution data in this article was obtained using Lex Machina. Each decision was assigned to a quarter of FY22 or FY23 based on the institution decision date. Numbers reflect institution decisions entered on or before December 31, 2022.

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