

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

PARTEC AG and BF EXAQC AG,

Plaintiffs,

v.

MICROSOFT CORPORATION,

Defendant.

Civil Action No. 2:24-cv-00433-RWS-RSP

JURY TRIAL DEMANDED

**DEFENDANT MICROSOFT CORPORATION'S RESPONSIVE CLAIM
CONSTRUCTION BRIEF**

MICROSOFT EXHIBIT 1031

Microsoft v. Partec

IPR2025-00318

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TABLE OF EXHIBITS

Exhibit No.	Description
A-P	Exhibits to ParTec’s Opening Claim Construction Brief (Dkt. 114).
1	File History of U.S. Patent No. 10,142,156 (ParTec_00000045) ¹ (“’156 File History”) (excerpted)
2	File History of U.S. Patent No. 11,934,883 (ParTec_00000517) ¹ (“’883 File History”) (excerpted)
3	U.S. Patent No. 7,406,692
4	February 28, 2025 ParTec’s Letter Dealing With Oral Proceedings During The Appeal Procedure (MSFT_PARTEC_000490125) ¹
5	File History of European Patent No. 2628080 (issued from EP 11768015.7 or PCT/EP 2011/067888), European Patent Application No. EP 11768015.7 (MSFT_PARTEC_000778568–MSFT_PARTEC_000778627) ¹
6	U.S. Patent Application No. 2011/0161972 to Dillenberger et al. (“Dillenberger”)
7	European Patent No. 2628080
8	Transcript of September 10, 2025 deposition of Simon Pickartz (“Pickartz Dep. Tr.”) (excerpted)
9	U.S. Patent Application No. 2012/0054770 to Krishnamurthy et al. (“Krishnamurthy”)
10	U.S. Patent Application No. 2004/0098447
11	U.S. Patent Application No. 2004/0257370
12	U.S. Patent Application No. 2005/0097300
13	U.S. Patent No. 6,922,832
14	U.S. Patent No. 7,051,188
15	U.S. Patent No. 7,093,147
16	U.S. Patent No. 7,137,040

* * All emphasis added unless otherwise indicated. * *

¹ The page numbers in Microsoft’s citations to these exhibits are to the production numbers of the produced versions.

I. INTRODUCTION

ParTec’s asserted patents² cover a specialized computer cluster system which includes both traditional computation nodes and independent “boosters” that provide accelerator functionality. ParTec was not, however, the first to combine traditional computation nodes and accelerators in a computer cluster. As a result, ParTec’s applications were repeatedly rejected during prosecution and the applications’ claims were amended and clarified many times before the first asserted patent, the ’156 patent, finally issued in 2018, nearly eight years after the alleged invention.

ParTec, however, seeks to wipe that slate clean—it asks the Court to disregard the arguments and amendments it made during prosecution and instead proposes “plain and ordinary meaning” constructions across the board. By contrast, Microsoft’s proposed constructions use ParTec’s own words and reflect the compromises and positions that rendered its patents allowable. The Court should therefore hold ParTec to its word and the bargains that it made during prosecution, and adopt Microsoft’s proposed constructions.

II. ADDITIONAL BACKGROUND ON THE ASSERTED PATENTS

A. Prosecution Of The ’156 and ’883 Patents

On October 13, 2010, Dr. Thomas Lippert—the sole named inventor of both the ’156 and ’883 patents—filed an application in the European Patent Office (EP10187436) directed to a particular “computer cluster arrangement.” *See* Ex. 1 (’156 File History) at 0122-0123. A year later, ParTec filed a PCT application (PCT/EP2011/067888) claiming priority to Dr. Lippert’s application. *See* Ex. 5. In Europe, ParTec sought a patent based on that PCT application, resulting in European Patent 2628080. *See* Ex. 7. In the United States, ParTec filed continuations based on

² U.S. Pat. Nos. 10,142,156; 11,537,442; and 11,934,883.

the PCT application that resulted in the '156 and '883 patents in the United States. *See* Ex. 1 ('156 File History) at 0118-0119; Ex. 2 ('883 File History) at 0520.

In order to secure issuance of its U.S. patents, however, ParTec had to make significant amendments and arguments over the course of extended prosecutions. Indeed, between the '156 and '883 patents, ParTec's applications faced five non-final and four final rejections. *See* Ex. 1 ('156 File History) at 0162, 0222, 0278, 0322, 0451; Ex. 2 ('883 File History) at 0806, 0868, 0914, 0954. In response, ParTec amended its claims seven times, made numerous arguments, and even submitted four requests for continued examination. *See* Ex. 1 ('156 File History) at 0181-0189, 0206-0215, 0257, 0264-0275, 0302-0314, 0339, 0437-0447, 0474-0486; Ex. 2 ('883 File History) at 0842-0853, 0897-0906, 0938-0946, 0974, 0980-0988. And ParTec also made numerous arguments concerning the foreign parent, EP2628080, which was challenged after issuance in the European Unified Patent Court, *see, e.g.*, Ex. 4, and ultimately cancelled.

III. DISPUTED TERMS FOR CONSTRUCTION

A. The '156 and '883 Patents

1. "Assigned to and shared by more than one of the plurality of hardware computation nodes" ('156 claims 1, 14)

ParTec's Proposed Construction	Microsoft's Proposed Construction
Plain and ordinary meaning	"simultaneously assigned to and useable by more than one of the plurality of hardware computation nodes"

Outside of this litigation, in the context of both the '156 patent and a foreign parent, ParTec has consistently and unambiguously asserted that the "assigned to and shared by" limitation requires that a booster be "*simultaneously*" assigned to and usable by multiple hardware computation nodes. *See* Ex. 1 ('156 File History) at 0484; Ex. 4 at 0140-141. Indeed, ParTec described that requirement as the "*key point* for the correct interpretation" of the claimed feature

and used it to distinguish its alleged invention from the prior art. *See, e.g.*, Ex. 4 at 0140. ParTec’s clear and unmistakable arguments thus demonstrate that its claims require a booster that can be simultaneously assigned to and usable by multiple computation nodes, both as a matter of disclaimer and as a matter of ordinary meaning in the context of the asserted patents.

To start, the independent claims of the ’156 patent require a system where a booster can be “assigned to and shared by more than one of the plurality of hardware computation nodes,” as can be seen in the excerpt of claim 1 below:

wherein the plurality of hardware computation nodes and the plurality of hardware boosters are configured such that during processing of said computation task, assignments of hardware computation nodes and hardware boosters can be provided such that at least (i) at least one of the plurality of hardware computation nodes is arranged to communicate with at least one of the plurality of hardware boosters, (ii) at least one of the plurality of hardware boosters is assigned to and shared by more than one of the plurality of hardware computation nodes such that the compute capacity of the at least one of the plurality of hardware boosters is shared between the more than one of the plurality of hardware computation nodes, and (iii) each of the hardware

Ex. A (’156 patent), claim 1. This claim limitation requires at least one booster that can be simultaneously used by multiple computation nodes, as evidenced by ParTec’s unambiguous assertions to the U.S. Patent Office and the European Unified Patent Court.

First, during prosecution of the ’156 patent itself, ParTec confirmed that “simultaneous” sharing is required when it distinguished prior art (the Dillenberger reference) that shared resources sequentially on the grounds they were “never . . . assigned to and shared by more than one (i.e., at least two) of the host systems.” *See* Ex. 1 (’156 File History) at 0484. During prosecution, the Examiner rejected the claims over Dillenberger and pointed to resources (accelerators) that could be reassigned from one host system to another sequentially. *See id.* at 0455-456; *see also* Ex. 6

(Dillenberger), [0013], [0015]-[0024]. In response, ParTec amended its claims and distinguished Dillenberger by explaining that its accelerators “are only dynamically reassigned ‘[a]fter all existing jobs have been completed’” and therefore are “never . . . assigned to and shared by more than one (i.e., at least two) of the host systems such that the compute capacity of the accelerator is shared between the host systems.” Ex. 1 (’156 File History) at 0484. ParTec’s arguments during prosecution of the ’156 patent thus demonstrate that “assigned to and shared by” requires simultaneous—not sequential—assignment and use. *See* Ex. 4 at 0140-141.

Second, in defending its parent EP 2628080 patent before the European Patent Office, ParTec confirmed that “shareability of the boosters” requires allowing “multiple computation nodes to use a booster *simultaneously*.” *See* Ex. 4 at 0141. ParTec’s statements were not mere idle commentary; rather, ParTec’s introductory remarks described that feature as a key distinguishing feature over the prior art. For example, ParTec explained that earlier systems “failed because the boosters were permanently assigned to their respective computation nodes . . . so that other computation nodes could not access the boosters from a purely technical point of view, i.e., could not use their intrinsic shareability.” Ex. 4 at 0140-141. And, according to ParTec, its invention solves that problem through simultaneous sharing:

point of view, i.e., could not use their intrinsic shareability. The invention solves exactly this rigid assignment and connects all computation nodes with all boosters, so that now, a resource manager can take advantage of the already existing shareability of the boosters and allow multiple computation nodes to use a booster simultaneously. This technical relationship is clearly described and disclosed in

Id. ParTec cannot now run away from the clear and unambiguous characterization of its invention.

ParTec attempts to avoid its clear and unmistakable disclaimer by arguing it would be “doubly improper” to rely on its statements in a foreign patent proceeding (Dkt. 114 (“Br.”) at 8)

but that argument has no merit. First, this is not merely a tangentially-connected patent, it is a parent application, and the Federal Circuit has recognized that “[a]ny statement of the patentee in the prosecution of a related application as to the scope of the invention would be relevant to claim construction[.]” *See Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004). Indeed, that relevance is “enhanced” if the statements were “made in an official proceeding in which the patentee had every incentive to exercise care in characterizing the scope of its invention,” *id.*—a glove that fits here, where ParTec made unambiguous statements regarding the scope of the invention in a parent patent in the Unified Patent Court ***while this litigation was pending.***

Second, courts regularly rely on statements made regarding foreign patents when not tied to unique aspects of foreign law. *See, e.g., Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1312 (Fed. Cir. 2014) (“This court has also considered statements made before a foreign patent office when construing claims if they are relevant and not related to unique aspects of foreign patent law.”), *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015); *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1374 (Fed. Cir. 2005) (holding that “blatant admission by this same defendant before the EPO” regarding “a virtually identical claim in Gillette’s European counterpart” patent application “clearly support[ed]” the court’s construction). And none of ParTec’s assertions implicates foreign law—rather, ParTec unambiguously explained that the simultaneous assignment and use of a booster by multiple computation nodes is a key feature of its invention. Nor can ParTec point to any difference in the claims as a reason to avoid its statements—a side-by-side comparison of the claim language shows that the claims of ’156 require sharing in the same fashion as do those of the European parent:

EP 2628080	'156 patent
“(ii) one or more of the boosters is shareable by more than one computation node of the plurality of computation nodes” Ex. 7, claim 1.	“(ii) at least one of the plurality of hardware boosters is assigned to and <i>shared by</i> more than one of the plurality of hardware computation nodes such that the compute capacity of the at least one of the plurality of hardware boosters is <i>shared between</i> the more than one of the plurality of hardware computation nodes” Ex. A ('156 patent), claim 1.

ParTec thus cannot disregard its unambiguous and unmistakable statements regarding the nature of its invention simply because it made them to the Unified Patent Court.

ParTec also argues that the construction would create ambiguity because “[n]othing in the '156 supports . . . that a booster must be ‘simultaneously’ ‘assigned’ and ‘usable’ by two nodes” (Br. at 7-8) but that cannot be squared with ParTec’s previous statements. ParTec itself unambiguously told the European Patent Office that the simultaneous assignment and usage of a booster by multiple computation nodes “is *clearly described and disclosed* in the patent” and pointed to portions of the specification also present in the '156 patent. *See* Ex. 4 at 0141. Indeed, a side-by-side comparison of the disclosures that ParTec pointed to as evidencing simultaneous assignment and usage in the European parent application and the corresponding portions of the '156 patent shows that they are identical:

EP 11768015.7 (issued as EP 2628080)	'156 patent
“In this computer cluster arrangement acceleration functionality is being provided by independent boosters. The described computer cluster arrangement allows a loose coupling of those boosters to computation nodes, which may also be referred to as compute nodes. Hence, a sharing of accelerators, here in form of boosters, by computation nodes is feasible. For an assignment of a booster to a computation node a resource manager, in form of a resource manager module or resource	“In this computer cluster arrangement acceleration functionality is being provided by independent boosters. The described computer cluster arrangement allows a loose coupling of those boosters to computation nodes, which may also be referred to as compute nodes. Hence, a sharing of accelerators, here in form of boosters, by computation nodes is feasible. For an assignment of a booster to a computation node a resource manager, in form of a resource manager module or resource

EP 11768015.7 (issued as EP 2628080)	'156 patent
manager node, may be provided. The resource manager may establish a static assignment at start of a processing of a computation task. Alternatively or additionally it may establish a dynamic assignment at runtime, which means during processing of the computation task.” Ex. 5 at 8574, lines 6-14 (cited by Ex. 4 at 0141).	manager node, may be provided. The resource manager may establish a static assignment at start of a processing of a computation task. Alternatively or additionally it may establish a dynamic assignment at runtime, which means during processing of the computation task.” Ex. A ('156 patent), 2:51-52 (cited by Br. at 7).

ParTec cannot credibly claim that “nothing in the '156 Patent” (Br. at 7) supports simultaneous assignment after telling the European Patent Office that the exact same language in a parent application “clearly” described that concept. *See* Ex. 4 at 0141. Moreover, ParTec does not identify any ambiguity supposedly introduced by Microsoft’s proposed construction (Br. at 8), nor could it—Microsoft’s construction removes ambiguity over the meaning of sharing.

Finally, even if the Court were to find ParTec’s arguments do not constitute disclaimer, ParTec’s arguments to the U.S. Patent Office and the European Patent Office constitute relevant claim construction evidence that unambiguously supports Microsoft’s proposed construction—the ordinary meaning of “shared by” in the context of ParTec’s patents requires simultaneous assignment. By contrast, ParTec identifies no evidence at all suggesting that its invention encompasses anything other than a system capable of simultaneously sharing a booster among multiple computation nodes. Nor could it credibly do so, given its statements *this year* saying its invention requires “simultaneous” sharing. *See* Ex. 4 at 0140-141. ParTec’s claims should be construed accordingly. *See Multi-Tech Sys., Inc.*, 357 F.3d at 1350.

2. “Assignment metric” ('156 claims 1–2, 13–15; '883 claims 1–2, 13–15)

ParTec’s Proposed Construction	Microsoft’s Proposed Construction
Plain and ordinary meaning	“measurements represented as a group of several parameters”

The dispute regarding the “assignment metric” term presents a similar issue—ParTec seeks a “plain and ordinary meaning” construction in an attempt to avoid its clear and unmistakable disclaimer during prosecution. Microsoft’s proposed construction, by contrast, comes directly from ParTec’s own argument—during prosecution, ParTec expressly asserted that the claimed “assignment metric” was “represented as a group of several parameters” and disclaimed any interpretation under which the metric could be a single value or parameter. *See* Ex. 1 (’156 File History) at 0272. And because ParTec “commit[ted] to a particular meaning” in prosecution in order to obtain its patents, that meaning is now “binding in litigation.” *See CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1158 (Fed. Cir. 1997).

ParTec’s assertions regarding the meaning of “assignment metric” during prosecution were clear, unambiguous, and unmistakable. During prosecution of the ’156 patent application, the Examiner rejected the claims over prior art utilizing a single parameter to assign computing resources, such as Krishnamurthy, which described a manager that “utilize[d] a threshold such as a number of operations per second.” *See* Ex. 1 (’156 File History) at 0272. In response, ParTec amended its claims and unequivocally characterized its “assignment metric” as “represented as a group of several parameters”:

First, even assuming that Krishnamurthy’s number of operations per second functions as an assignment metric, with which Applicant does not necessarily agree, Applicant’s independent claim 1 as amended clarifies that Applicant’s assignment metric is a function of a group of assignment parameters. Therefore, Applicant’s assignment metric is not simply a metric represented as a single numeric value, and is instead represented as a group of several parameters.

See id. The claimed assignment thus requires “several parameters” and is “**not** simply a metric represented as a single numeric value.” *Id.* *See also Azurity Pharms., Inc. v. Alkem Lab’ys Ltd.*, 133 F.4th 1359, 1367–68 (Fed. Cir. 2025) (finding clear disclaimer when the patentee amended

the claims to adopt a ““consisting of” [limitation] specifically to narrow the claims and overcome [the prior art] and its disclosure”).

Moreover, ParTec also invoked its lexicographical power and asserted that “assignment metric” was defined in the specification to be “representative of one of several groups of parameters”:

To this end, Applicant also disagrees with the Final Action’s allegation that Applicant’s assignment metric is not explicitly defined by Applicant’s specification. Final Action, p. 8. Applicant respectfully points out paragraph [0017]¹ of Applicant’s specification as originally filed, which states the following:

For accomplishing the assignment between boosters and computation nodes a specific set of rules is required. Therefore, an assignment metric is provided, which serves as a basis for the decision which booster is coupled with which computation node. The assignment metric may be managed by a resource manager. Managing the assignment metric *refers to establishing and updating rules naming at least one booster, which is assigned to at least one further named computation node.*

Specification, para. [0017], emphasis added.

In other words, Applicant’s specification as originally filed explains that the assignment metric may be managed via a set of rules, and therefore the assignment metric is representative of one of several groups of parameters utilized as part of these rules. Also see, e.g., Applicant’s specification at paragraph [0023].

Ex. 1 (’156 File History) at 0272-273. In short, ParTec told the Patent Office that its specification defined “assignment metric,” pointed to a specific portion of the specification, and characterized the “assignment metric” as being “representative of one of several groups of parameters.” *Id.* ParTec cannot now walk away from its own definitional statement. *See Personalized Media Comms., LLC v. Apple Inc.*, 952 F.3d 1336, 1340 (Fed. Cir. 2020) (“an applicant’s repeated and consistent remarks during prosecution can define a claim term by demonstrating how the inventor understood the invention”); *CVI/Beta Ventures*, 112 F.3d at 1158; *Aortic Innovations LLC v. Edwards Lifesciences Corp.*, No. 2024-1145, 2025 WL 2999367, at *5–6 (Fed. Cir. Oct. 27, 2025).

ParTec now seeks to retreat from those unequivocal statements with a bevy of arguments (Br. at 11-14), none of which have merit. **First**, ParTec’s assertion that Microsoft seeks to add a

limitation “that already appears elsewhere” (Br. at 11-12) is simply incorrect. Microsoft is not adding an additional limitation—the proposed construction simply defines what the required “assignment metric” is, i.e., a measurement represented by several parameters. The other claim language ParTec points to describes the type of parameters that can be used, such as the “resource information, cost information, complexity information,” etc., in dependent claim 5 of the ’883 patent, or how the metric can be used to “establish an initial assignment . . . specified as a function of at least one of a group of assignment parameters,” as in claim 1 of the ’156 patent. Indeed, Microsoft’s proposed construction is entirely consistent with the claims’ requirement that the initial assignment be “specified as a function of at least one of a group of assignment parameters.”

Second, ParTec’s contention that Microsoft’s construction “runs counter” to the specification or limits the claim to a preferred embodiment (Br. at 12) is wrong. As ParTec itself pointed out during prosecution, the specification makes clear that a “specific set of rules” (plural) is “**required**” to accomplish “assignment between boosters and computation nodes.” See Ex. A (’156 patent), 3:47-48; see also Ex. 1 (’156 File History) at 0273. The requirement for multiple rules is no mere example, it is an unambiguous requirement set forth by the patentee that is specifically tied to the assignment metric. See Ex. A (’156 patent), 3:48-51 (“Therefore, an assignment metric is provided, which serves as a basis for the decision which booster is coupled with which computation node.”). Moreover, ParTec identifies no embodiment with a single-parameter or single-rule assignment metric because none exists. Every description in the specification—whether in the “Summary of the Invention” or detailed embodiments—depicts the assignment metric as incorporating multiple measurable parameters. See Ex. A (’156 patent). Microsoft’s construction faithfully reflects this teaching without excluding any embodiment.

Third, ParTec’s attempt to cabin its prosecution arguments to a specific instance of the asserted claim does not bear scrutiny. ParTec’s arguments were broad and unambiguously defined “assignment metric” without limiting that definition to any specific claim. *See* Ex. 1 (’156 File History) at 0273. Indeed, during prosecution, ParTec even went so far as to point out (in a footnote) that its claims and definitional remarks were “not limited to the embodiment described in this portion of Applicant’s specification.” *See id.* at 273, n.1. ParTec cannot narrow those arguments now.

Finally, ParTec’s reliance on ordinary English dictionaries and assertion that “assignment metric” is used in the “ordinary sense to mean a metric or measurement for assignment” (*see* Br. at 9-10) cannot be squared with its prosecution arguments. As pointed out above, ParTec expressly “disagree[d]” with the Examiner’s position that “assignment metric is not explicitly defined by Applicant’s specification,” then pointed to a portion of a specification as defining the term. *See* Ex. 1 (’156 File History) at 0272-273. ParTec cannot now credibly argue that the term should be defined using non-technical dictionaries.

In sum, ParTec’s unambiguous disclaimer and lexicography established a clear definition of “assignment metric” and its previous statements and definition are “binding in litigation.” *See CVI/Beta*, 112 F.3d at 1158. Microsoft’s proposed construction, which reflects ParTec’s disclaimer and lexicography, should thus be adopted.

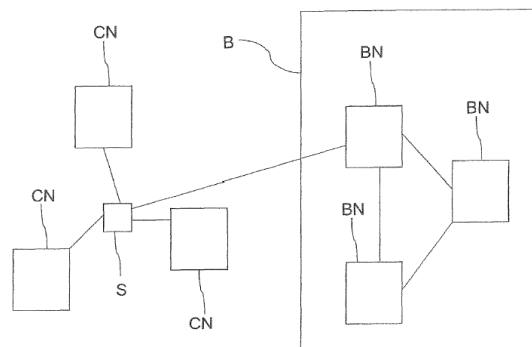
3. “Booster” (’156 claims 1, 4, 6–8, 12–15; ’883 claims 1–2, 6–7, 11–13, 15)

ParTec’s Proposed Construction	Microsoft’s Proposed Construction
Plain and ordinary meaning	“one or more booster nodes”

The dispute over “booster” presents a straightforward question of claim construction: ParTec contends that “booster” is an ordinary word that should be given a generic (and undefined) meaning derived from non-technical dictionaries (Br. at 14-15), but that cannot be reconciled with

its patents—the “booster concept” is one of the supposedly inventive ideas at the heart of the invention. *See* Ex. 1 (’156 File History) at 0378-379, 0394. By contrast, Microsoft proposes a construction that recognizes the inventor’s “booster” concept and is consistent with the intrinsic record—“one or more booster nodes.” Microsoft’s proposal thus should be adopted.

As an initial matter, Microsoft’s proposed construction is well supported by the intrinsic evidence, which consistently uses “booster” to refer to a cluster of one or more booster nodes. Indeed, the specification explicitly allows the booster to comprise any number of the booster nodes: “A booster B may, for example, comprise 1 to 10,000 booster nodes (BN), but is not restricted to this range.” *See* Ex. A (’156 patent), 12:65-66. Moreover, the specification describes how boosters can be formed from booster nodes by the resource manager: “The resource manager may generally manage parts of the booster nodes BN and can therefore partition the overall number of booster nodes BN and dynamically form boosters B out of said number of booster nodes BN.” *See id.*, 12:67-13:3. And Fig. 9 clearly depicts the booster B being comprised of one or more booster nodes BN:



Id., Fig. 9. The named inventor, Dr. Lippert, depicted boosters as being comprised of multiple booster nodes since the very beginning—documents allegedly demonstrating conception depict the “booster” as comprised of “10.000 [ten thousand] elements” connected using a high-speed “communication system EXTOLL,” *see* Ex. 1 (’156 File History) at 0379, and shows the “booster”

is made up of multiple “BN” [booster nodes] connected with a communication network. *See id.* at 0394. The intrinsic evidence thus demonstrates that the claimed “booster” is a cluster of one or more booster nodes.

ParTec objects that Microsoft’s proposed construction “re-write[s] ‘booster’ to ‘booster nodes’” (Br. at 14) but that is simply mistaken. Microsoft’s proposal acknowledges the difference between a booster and booster nodes, recognizing that a single booster can be made up of multiple booster nodes. Put another way, the “booster” refers to the overall cluster, which is dynamically managed by the resource manager, and “booster nodes” are components within a booster. Nor is it surprising that portions of the intrinsic evidence mention boosters without mentioning booster nodes, as ParTec points out (Br. at 17-18)—describing how boosters can be used (e.g., assigned to computation nodes) can be done without addressing the underlying implementation (a group of one or more booster nodes).

ParTec also argues that the specification’s discussion of booster nodes merely describes “one embodiment” and is thus non-limiting (Br. at 15-16) but that mistakes Microsoft’s proposed construction. Microsoft does not propose limiting the claims to either the three node embodiment depicted in Fig. 9, nor to the “1 to 10,000” range mentioned in the specification; rather, Microsoft’s proposal recognizes the booster as a scalable construct made up of any number of booster nodes. Microsoft’s proposed construction thus gives life to the patentee’s choice to use “booster” rather than a single “booster node” in its claims.

In sharp contrast, ParTec’s proposed ordinary meaning construction cannot satisfy the principles of claim construction. First, ParTec’s proposal is based on general-purpose dictionary definitions of the English word “booster” (Br. at 15), a disfavored form of extrinsic evidence. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1321-22 (Fed. Cir. 2005) (warning against reliance on

“general dictionaries” used in “many different settings”). Indeed, according to ParTec, a booster is essentially anything that “increase[es] power or effectiveness.” Br. at 15 (citing a non-technical dictionary from 1991). But “booster” is not used here as a common English term—rather, it is a technical term that represents a supposedly novel concept. *See, e.g.*, Ex. 1 (’156 File History) at 0378-379, 0394. ParTec cannot use general dictionaries to broaden the term “booster” to “extend patent protection beyond what should properly be afforded by the inventor’s patent.” *See Phillips*, 415 F.3d at 1322.

Second, “booster” appears to be a term coined by the inventor, thus must be construed; it cannot be defined by reference to a non-existent “ordinary and customary meaning.” *See Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1287 (Fed. Cir. 2010) (“terms coined by the inventor are best understood by reference to the specification”); *Iridescent Networks, Inc. v. AT&T Mobility, LLC*, 933 F.3d 1345, 1353 (Fed. Cir. 2019) (“the disputed term is a coined term, meaning it has no ordinary and customary meaning”). Not only did the inventor’s supposed invention start with a “booster concept,” *see* Ex. 1 (’156 File History) at 0394, ParTec itself reviewed “a variety of patent applications and patents that appear in the prosecution history” and confirmed none use the term booster. *See* Br. at 19 (citing Exs. 3, 10-16).³ Indeed, ParTec cites no evidence that “booster” was ever used in the art before the supposed invention and even ParTec’s own technical employees are not familiar with the term outside of the context of the patent. *See, e.g.*, Ex. 8 (Pickartz Dep. Tr.) at 95:7–12 (“Q. You don’t know of any ordinary meaning of the term ‘booster’ that’s used across multiple contexts in the field of high-performance computing? A. No, I am not aware of such an

³ Exs. 3, 10-16 were cited in the prosecution histories of the ’156 and ’883 patents, *see* Ex. 1 (’156 File History) at 0095, 0196; Ex. 2 (’883 File History) at 0526, and are thus part of the intrinsic record. *See V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1311 (Fed. Cir. 2005) (prior art “listed as a reference on the face of” a patent “constitutes intrinsic evidence”).

ordinary meaning.”). And as a “coined term,” booster “has no ordinary and customary meaning” in the art and must be construed. *See Iridescent Networks*, 933 F.3d at 1353.

Accordingly, “booster” should be construed as “one or more booster nodes” based on the consistent intrinsic evidence and the inventor’s “booster concept.”

4. “Computer cluster-booster [system/arrangement]” (’156 claims 1, 14) / “computer cluster [system/arrangement]” (’883 claims 1, 13)

ParTec’s Proposed Construction	Microsoft’s Proposed Construction
Preamble not limiting. If limiting, plain and ordinary meaning.	Limiting

The preambles of the independent claims of the ’156 and ’883 patents are limiting because ParTec clearly used them to “during prosecution to distinguish the claimed invention from the prior art.” *See Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017) (quoting *Catalina Mktg. Int’l v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)). Having made those arguments to obtain its patents and repeatedly and consistently described its invention as a type of “computer cluster” system, ParTec cannot now switch gears and attempt to avoid the fact that its claims are limited to “computer cluster-booster” and “computer cluster” systems and arrangements.

First, during examination of the ’156 patent, ParTec clearly relied on its preamble to distinguish the Krishnamurthy prior art references. In its submission to the Patent Office on July 6, 2017, for example, ParTec’s lead argument distinguished Krishnamurthy by contrasting Krishnamurthy’s “high-throughput computing system” with “the computer cluster-booster arrangement *to which Applicant’s claims are directed.*” *See* Ex. 1 (’156 File History) at 0309. That was not an off-hand statement—ParTec supported its argument by “cit[ing] to two different sources to help explain the meaning of cluster computing arrangements as understood by one of ordinary skill in the art”:

(1) A cluster can also refer to a group of machines that work together that perform a similar function. Unlike grid computing, a computer cluster is controlled by a single software program that manages all the computers or “nodes” within the cluster. The nodes work together to complete a single task. This process is called “parallel computing” since the nodes perform operations in tandem. Computer clusters can range from two machines to hundreds of connected computers. Small clusters are often used to improve the performance of web and online gaming services by handling multiple incoming requests in parallel. A web farm, for example, is a type of cluster that provides low latency access to websites. Large clusters can be used to perform scientific calculations or to run a large number of complex algorithms. For example, a large cluster may be used to apply textures and lighting effects to 3D models in each frame of an animated movie.

See, <https://techterms.com/definition/cluster>.

(2) A computer cluster consists of a set of loosely or tightly connected computers that work together so that, in many respects, they can be viewed as a single system. Unlike grid computers, computer clusters have each node set to perform the same task, controlled and scheduled by software. The components of a cluster are usually connected to each other through fast local area networks, with each node (computer used as a server) running its own instance of an operating system. In most circumstances, all of the nodes use the same hardware and the same operating system, although in some setups (i.e. using Open Source Cluster Application Resources (OSCAR)), different operating systems can be used on each computer, and/or different hardware.

See, https://en.wikipedia.org/wiki/Computer_cluster.

See Ex. 1 (’156 File History) at 0309-310. And based on those definitions, ParTec told the Examiner, “[t]hus, as understood by one of ordinary skill in the art, Krishnamurthy is not directed to a **computer cluster arrangement**.” *Id.* at 0310 (emphasis added by ParTec during prosecution).

That was not the only time that ParTec had argued over the Krishnamurthy prior art based on the language in the preamble of the claims. Earlier that summer, ParTec made distinguishing the prior art from “the **computer cluster-booster arrangement** to which Applicant’s claims are directed” the first item on its agenda for a call with the Examiner:

- Krishnamurthy 770 and Krishnamurthy 127 are directed to different types of computer architectures, each processing data in a different manner than the **computer cluster-booster arrangement** to which Applicant’s claims are directed. In particular, Krishnamurthy 770’s overall operating environment 100 at best functions not as a computer cluster, but as a **single** computation node.

Ex. 1 (’156 File History) at 0295 (emphasis added by ParTec during prosecution). And ParTec continued to distinguish Krishnamurthy from a preamble’s language at other points during prosecution. See, e.g., Ex. 1 (’156 File History) at 0311 (“However, Krishnamurthy 770’s overall operating environment 100 at best functions not as a computer cluster, but as a single computation node”); *id.* at 0312 (“Krishnamurthy 127 is likewise not directed to a computer cluster arrangement”); *id.* at 0444 (submission on February 19, 2018, which again cited the definitions of “cluster computer” and asserted “as understood by one of ordinary skill in the art, Krishnamurthy

is not directed to a *computer cluster arrangement*”) (emphasis added by ParTec during prosecution). Those statements constitute clear and unambiguous reliance on the preamble more than sufficient to render it limiting—indeed, courts have found that far less justified finding a preamble to be limiting in other cases. *See, e.g., Rotatable Techs. LLC v. Motorola Mobility LLC*, 567 F. App’x 941, 943-44 (Fed. Cir. 2014) (finding preamble limiting based on brief passage distinguishing the prior art); *see also Accolade Sys. LLC v. Citrix Sys., Inc.*, 634 F. Supp. 2d 738, 743-44 (E.D. Tex. 2009) (finding preamble’s recitation of “controlling a computer” to be a limitation because “the applicant distinguished the claimed invention from the prior art by referring to the claimed invention’s characteristic of controlling a host computer.”).⁴

ParTec argues that it also amended the body of the claims to “clarify the interaction between Applicant’s computing nodes and boosters” during its submission on July 6, 2017 (Ex. 1 (’156 File History at 0310)), thus did not rely on the preamble (Br. at 21-22) but that argument fails for several reasons. First, the additional amendment does not erase ParTec’s clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art,” which “transform[ed] the preamble into a claim limitation.” *Catalina Mktg.*, 289 F.3d at 808; *see also Frac Shack Inc. v. Fuel Automation Station, LLC*, 300 F. Supp. 3d 1333, 1353 (D. Colo. 2018) (disregarding additional “amendment to the structural body of claims” and giving preamble limiting effect due to clear reliance). Second, ParTec ignores the fact that it continued to distinguish the prior art based on its preamble after the amendment—ParTec made the *same argument* eight months later, without any amendment, thus clearly relied on the language in its preamble. *See* Ex. 1 (’156 File

⁴ *IMS Technology, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422 (Fed. Cir. 2000), which ParTec cites (Br. at 20-21), does not address reliance on the preamble to overcome prior art during prosecution, and is thus completely inapplicable.

History) at 0438, 0440, 0443-445. ParTec does not even address that repeated argument to the Patent Office in its opening brief.

In addition to ParTec’s clear reliance on its preambles during prosecution, ParTec’s inventions are unambiguously described as relating to computer clusters and a cluster-booster architecture, thus the preambles describe a “fundamental characteristic of the claimed invention that is properly construed as a limitation of the claim itself.” *Poly-America, L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1310 (Fed. Cir. 2004). Indeed, the term “computer cluster” is used throughout the ’156 and ’883 patents—as in *Rotatable Technologies*, it appears in the “title, abstract, background of the invention, summary of the invention, description of the drawings, detailed description, and all independent claims,” and thus further supports finding the preamble to be limiting. *See Rotatable Techs.*, 567 Fed. App’x at 943; *see also Poly-America*, 383 F.3d at 1310 (finding preamble limiting where “[t]he specification is replete with references to the invention as [the preamble], including the title of the patent itself and the ‘Summary of the Invention.’”).

Simply put, ParTec’s invention, claims, and preambles are all directed toward a supposedly improved “computer cluster” architecture using “boosters”; ParTec repeatedly relied on that fact to argue over prior art during prosecution; and the nature of the architecture gives life, meaning, and vitality to the claims. The preambles should thus be found limiting.

5. “Outsource the [second] part of the computation task to the assigned selected [hardware] booster under control of the first [hardware] computation node” (’883 claims 1, 13)

ParTec’s Proposed Construction	Microsoft’s Proposed Construction
Plain and ordinary meaning	“move the [second] part of the computation task from the first [hardware] computation node to the assigned booster, without implicating the resource manager”

The dispute over this term is two-fold. First, Microsoft proposes that the Court construe “outsource” as ParTec expressly defined it during prosecution, whereas ParTec argues for leaving it undefined. Second, Microsoft proposes that the Court construe “under control of the first [hardware] computation node” in the same way that ParTec did when it sought to avoid the prior art, while ParTec, again, contends that it should be left as “plain and ordinary meaning.” The law is clear, however, that arguments and positions during prosecution are “binding in litigation” and ParTec’s claims should thus be construed according to Microsoft’s proposals. *See CVI/Beta*, 112 F.3d at 1158.

a) ParTec defined “outsource” during prosecution and is now bound by its own lexicography.

During prosecution, ParTec expressly defined the meaning of the claim limitation at issue, including the disputed “outsourc[ing]” phrase (highlighted in context below):

provide assignment information to the first hardware computation node after the assignment of the selected hardware booster so as to enable the first hardware computation node to outsource the part of the computation task to the assigned selected hardware booster under control of the first hardware computation node,

Ex. B (’883 patent), claim 1. Indeed, ParTec walked through the limitation and explained what it meant, starting by noting it described a “two-step procedure”: first, the resource manager assigns the booster node to the computation node; and second, the computation node outsources the task to the assigned booster. *See* Ex. 2 (’883 File History) at 0903-904. ParTec then used definitional language to explain how that second, outsourcing step occurs:

In the second step, the first hardware computation node uses said assignment information to outsource a part of the computation task from the first hardware computation node to the assigned booster. The claim language clearly defines that the part of the computation task is moved **from** the first hardware computation node **to** the assigned booster (“the hardware computation node **to output** the part of the computation task to the assigned selected hardware booster” – emphasis added).

Id. at 0904 (bold emphasis added by ParTec during prosecution). ParTec thus expressly defined the meaning of its claims—in the context of the ’883 patent, “outsource” means that “part of the computation task is moved from the first hardware computation node to the assigned booster.” *See id.* Having expressly defined what it means to “outsource” part of a task, ParTec cannot now argue its claims cover any broader meaning. *See, e.g., Honeywell Inc. v. Victor Co. of Japan*, 298 F.3d 1317, 1323-24 (Fed. Cir. 2002) (“It is well settled that a patentee may define a claim term either in the written description of the patent or, as in the present case, in the prosecution history.”).

ParTec argues that there is “no reason” to construe outsource (Br. at 27) but that argument ignores (as does ParTec’s opening brief) its arguments during prosecution. ParTec cannot clearly define the meaning of its claims during prosecution, then hide its head in the sand when it comes to litigation. *See* Ex. 2 (’883 File History) at 0903-904; *see also Honeywell*, 298 F.3d at 1323-24 (construing term defined during prosecution). And ParTec’s assertion that simply substituting one word for another is not helpful (Br. at 27) has no force here because ParTec itself made those substitutions during prosecution. By contrast, in *Astute Tech.*, on which ParTec relies, “there [was] nothing in the specification or prosecution history record” supporting the proposed construction. *See Astute Tech., LLC v. Learners Dig. Int’l LLC*, No. 2:12-CV-689-JRG, 2014 WL 1385191, at *20 (E.D. Tex. Apr. 2, 2014). Moreover, ParTec cannot credibly assert the proposed construction has no meaning—if so, there would have been no reason for it to make the prosecution argument at all. *See* Ex. 2 (’883 File History) at 0903-904.

b) ParTec unmistakably argued that its computation nodes outsource tasks to the assigned booster on their own, without needing the resource manager.

In addition, ParTec clearly and unmistakably argued that the final portion of the disputed phrase—“under control of the first [hardware] computation node”—means that outsourcing tasks can be done “without implicating the resource manager.” *See* Ex. 2 (’883 File History) at 0904. Indeed, ParTec described it as a “further limitation” that the computation node can outsource tasks to the assigned booster “without further need to implicate the resource manager”:

A further limitation is that the output/outsourcing is performed “under control of the first hardware computation node.” Accordingly, after the assignment is performed by the resource manager, the first hardware computation node can make use of the assignment and outsource parts of the computation tasks to the assigned boosters (without further need to implicate the resource manager).

See Ex. 2 (’883 File History) at 0904. And ParTec did so in order to distinguish prior art. In the prior art Krishnamurthy system, “the workload manager dynamically allocates/provides additional kernels,” which ParTec “considered to be sub-tasks,” to “the server systems/accelerators.” *See* Ex. 2 (’883 File History) at 0870-871, 0904-905; *see also* Ex. 9 (Krishnamurthy), [0038]-[0040], Fig. 2. ParTec thus sought to clarify that Krishnamurthy’s task assignment method was “completely different” from its claims—indeed, according to ParTec, having a computation node send tasks to an assigned booster provided an “advantage” because it could be done over and over again:

Third, the output of the part of the computation task is not done under the control of the first hardware computation node, i.e., the hardware computation node which receives assignment information. Instead, according to Krishnamurthy, the workload manager dynamically allocates/provides additional kernels to the server systems/accelerators.

Accordingly, the system described in Krishnamurthy is completely different from the claimed features. One advantage of the present invention is that after a booster has been assigned to a computation node, the computation node can make use of the booster and outsource parts of the computation tasks to the booster under said assignment. Such an outsourcing can be done repeatedly under the assignment.

See Ex. 2 (’883 File History) at 0905. ParTec’s prosecution arguments thus clearly and unmistakably show that, in the claims of the ’883 patent, the resource manager’s role is limited to

assignment and, afterward, the computation node must be capable of outsourcing tasks to the booster on its own. Moreover, having made those clear arguments to overcome prior art, ParTec cannot now seek to reclaim a broader scope. *See CVI/Beta*, 112 F.3d at 1158 (meaning committed to during prosecution is “binding in litigation”).

ParTec argues that Microsoft’s proposed construction would “add a nonexistent limitation” to the claims (Br. at 27-28) but that cannot be squared with the claim language. The claims expressly require enabling a first computation node to outsource part of a task to a booster “under control of the first [hardware] computation node.” *See, e.g.*, Ex. B (’883 patent), claim 1. Microsoft’s proposed construction construes that existing limitation (based on ParTec’s interpretation during prosecution), it does not add a new limitation. Indeed, Microsoft’s proposal is simply the ordinary meaning of the “under control . . .” phrase when read in light of the intrinsic evidence, including the prosecution history. Nor does ParTec provide any alternative interpretation of the “under control . . .” portion of the limitation—indeed, its paraphrase of the claim limitation notably omits the phrase. *See* Br. at 27-28.

ParTec’s contention that the proposed construction should be rejected because it excludes “preferred embodiments” (Br. at 28) is also incorrect. First, ParTec does not actually identify any “preferred embodiment.” To the contrary, the ’883 patent describes the embodiments on which ParTec relies (where the resource manager passes a part of a task to a booster) as “an aspect of the present invention,” no more important than any other embodiment. *See, e.g.*, Ex. B (’883 patent), 11:4-6, 11:35-37. Second, the ’883 patent explicitly includes an embodiment where “resource manager RM does *not* pass the at least one part of the computation task to the booster B” and “computation node CN is now able to directly access the booster B.” *See id.*, 11:60-12:1. These two categories of embodiments are mutually exclusive; thus, the fact ParTec’s claims read on the

latter, but not the former is no surprise at all, much less reason to reject Microsoft's proposed construction. "[T]he claims of the patent need not encompass all disclosed embodiments." *See TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1373 (Fed. Cir. 2008).

ParTec also argues that the resource manager is "implicated" in all embodiments (Br. at 28-29) but that reads the proposed construction too broadly. Nothing in Microsoft's proposed construction prohibits the resource manager from providing "an address or a further identification of a booster B" to the computation node, such that the computation node can establish direct communication with the booster. *Cf.* Ex. B ('883 patent), 11:60-66.⁵ To the contrary, only when the computation node outsources, i.e. moves, the part of the task to the booster does the claim require it be done "under control of the first [hardware] computation node," i.e., without implicating the resource manager. Microsoft's proposed construction thus does not read out any preferred embodiment. Rather, it properly gives effect to ***ParTec's choice*** to claim a specific embodiment—as is reflected in ParTec's arguments to the Patent Office. *See* Ex. 2 ('883 File History) at 0904-905.

Finally, ParTec asserts that use of the word "can" in the prosecution history eliminates the force of its previous statements (Br. at 29-30) but, again, that provides no escape from its arguments to the Patent Office. The plain language of the claims requires that the resource manager "***enable***" the computation node to "outsource" part of a task—it requires only a specific ***capability***:

⁵ Indeed, an address or a further identification of the assigned booster would naturally be provided as part of the first step in the limitation, which requires that the resource manager "provide assignment information to the first computation node." *See* Ex. B ('883 patent), claim 1.

provide assignment information to the first hardware computation node after the assignment of the selected hardware booster so as to enable the first hardware computation node to outsource the part of the computation task to the assigned selected hardware booster under control of the first hardware computation node,

Ex. B ('883 patent), claim 1. As such, ParTec's prosecution history arguments use the term "can" to describe the capability that its claims require; they do not use the word "may" or suggest that the capability is optional. *See* Ex. 2 ('883 File History) at 0905. Systems that lack that capability, i.e. systems where tasks can only be assigned to boosters by the resource manager, simply do not fall within the claim scope.

In sum, Microsoft's proposed construction—which requires enabling the computation node to "move the [second] part of the computation task from the first [hardware] computation node to the assigned booster, without implicating the resource manager"—comes directly from the claim language and ParTec's arguments during prosecution, and is consistent with the specification. By contrast, none of ParTec's excuses supports its attempt to ignore its prosecution arguments.

B. The '442 Patent

1. "First computing iteration" / "further computing iteration" ('442 claims 1, 3, 7, 9)

ParTec's Proposed Construction	Microsoft's Proposed Construction
Plain and ordinary meaning	"an initial execution of the plurality of sub-tasks" / "a repeated execution of the plurality of sub-tasks"

Both parties agree on the fundamental point: an iteration requires repetition. *See, e.g.*, Br. at 24-25. ParTec itself acknowledges that an iteration is "a repetition of a sequence of operations" (*Id.* at 23 (citing Ex. J)) or a "repeated application of a program or set of instructions." *Id.* at 25. Microsoft's construction is fully consistent with that shared understanding—that "iteration," by

definition, involves a repeated execution. The only genuine dispute is whether each iteration involves the *same* plurality of sub-tasks.⁶ The claims answer that question unambiguously—they do. Microsoft’s construction reflects that straightforward reading of the claim language and thus should be adopted, whereas ParTec’s argument that “it may not be the same sub-tasks repeated in each iteration” (Br. at 25) should be rejected as flatly inconsistent with the claims and specification.

Indeed, applying basic principles of claim construction to the claim language itself demonstrates that the sub-tasks executed in the first computing iteration are the same sub-tasks executed in the subsequent computing iteration. As shown below, claim 1 of the ’442 patent recites processing “*the* plurality of sub-tasks” in the “first computing iteration” and “*the* plurality of sub-tasks” in the “further computing iteration”:

in a first computing iteration, assigning and processing the plurality of sub-tasks by at least a portion of the plurality of computation nodes and at least a portion of the plurality of booster nodes in a first distribution; and generating, using information relating to the processing of the plurality of sub-tasks by at least the portion of the plurality of computation nodes and at least the portion of the plurality of booster nodes, a further distribution of the plurality of sub-tasks between the plurality of computation nodes and the plurality of booster nodes for processing thereby in a further computing iteration.

Ex. C (’442 patent), claim 1; *see also id.*, claim 9 (similarly repeating of “the” plurality of sub-tasks). Both clauses use the same phrase—*the plurality of sub-tasks*—demonstrating that the

⁶ ParTec also takes issue with Microsoft’s use of the term “initial” instead of “first,” (Br. at 24-25) but that concern is misplaced. Microsoft did not change the meaning of the term “first” or add any new limitations—“first” and “initial” are synonyms. Indeed, Microsoft’s proposal used “initial” solely to indicate the temporal sequence between the first and subsequent iterations—a sequence that ParTec does not dispute. Accordingly, if it would resolve ParTec’s concerns, Microsoft would not object to revising its proposed construction of “first computing iteration” to read “a *first* execution of the plurality of sub-tasks.”

claim refers to the same set of sub-tasks throughout. Under black letter principles of claim construction (as well as grammar), repeated use of “the” refers back to the same previously introduced element. *See Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008) (“subsequent use of definite articles ‘the’ or ‘said’ in a claim to refer back to the same claim term”); *see also Carrum Techs., LLC v. Ford Motor Co.*, No. 2024-1183, 2025 WL 2924504, at *4-5 (Fed. Cir. Oct. 15, 2025) (quoting *Baldwin*). That rule alone answers the question: it is the **same** “plurality of sub-tasks” that is executed in the “first computing iteration” and then repeated in the “further computing iteration.”

Microsoft’s construction is also fully consistent with the specification and the goal of the invention. The specification itself consistently discusses changing the **division** of sub-tasks among booster and computation nodes (based on whether they are “more or less suitable” for each), not adding or removing sub-tasks. *See* Ex. C (’442 patent), 3:50-4:37. Moreover, the patent describes using a feedback process where information about the processing of sub-tasks is collected and used “to determine whether the distribution of sub-tasks to computation nodes and boosters could be adjusted to optimize or adapt the computation of the task for a subsequent iteration.” *See id.*, 4:5-12. That feedback mechanism—collecting performance data in one iteration and redistributing the sub-tasks based on that performance data in the next iteration—depends on re-executing those same sub-tasks. Changing the sub-tasks from one iteration to the next would render the performance data unreliable—because different sub-tasks may require a different mix of computation nodes and booster nodes, *cf. id.*, 3:62-66—and thus undermine the claimed approach.

By contrast, ParTec’s assertion that the claims do “not refer to or require that the sub-tasks in every distribution be identical” (Br. at 25) is nothing less than an attempt to rewrite the claim and should be rejected. First, ParTec ignores the claims’ repeated use of the **same** phrase—“*the*

plurality of sub-tasks”—for both the first and further iterations. *See* Br. at 23-24 (notably omitting the key phrase from ParTec’s summary of claim 1). But ParTec cannot ignore black letter law that requires “the plurality of sub-tasks” be the same from iteration to iteration. *See Baldwin*, 512 F.3d at 1342.

Second, ParTec’s assertion that “the ’442 Patent specifically teaches that it may *not* be the same sub-tasks repeated in each iteration or execution phase” (Br. at 25 (citing Ex. C (’442 patent), 3:44-46)) is flat wrong. The passage ParTec relies on describes how a “job . . . may comprise a number of *tasks* some of which or all may be repeated,” but says nothing about *sub-tasks*. *See* Ex. C (’442 patent), 3:44-46. And while not all tasks are necessarily repeated, the specification shows that, if a task is repeated, all of its sub-tasks are repeated as well. *See id.*, 3:59-4:3. ParTec’s argument thus simply has no weight when it comes to the repetition of *sub-tasks* required by the claims. ParTec also points to the specification’s discussion of “any need to call further sub-tasks during processing” (Br. at 25 (quoting Ex. C (’442 patent), 4:48-52) (emphasis omitted)) but the remainder of the passage concerns the *distribution* of sub-tasks between boosters, not the creation of entirely new sub-tasks. Indeed, the very next sentence addresses an example where “a first sub-task being handled by a booster [that] requires input from a second sub-task not being handled by the booster” could create a problem that could be resolved if “in a further iteration both the first and second sub-tasks are handled by the booster.” *See* Ex. C (’442 patent), 4:52-59. The passage thus addresses moving sub-tasks between boosters to improve efficiency, not adding new sub-tasks.

Third, even if ParTec’s reading of the specification had merit (it does not), ParTec still could not justify changing the claims. “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims

absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004). Here, ParTec does not even identify any preferred embodiment, much less any “clear indication” justifying departure from the claim language.

Finally, to the extent that ParTec intends to argue that the claims’ use of the term “iteration” requires “application of a program or set of instructions” (Br. at 25 (emphasis added by ParTec during prosecution)), such an argument has no basis in the intrinsic evidence or in law. Neither the claims nor the specification of the ’442 patent refer to “a program” or a “set of instructions,” nor does ParTec cite any source for that particular interpretation—it does not even appear to come directly from any of the cited technical dictionaries. *See* Ex. C (’442 patent). To the contrary, a straightforward reading of the claims demonstrates that it is “*the* plurality of sub-tasks” that is repeated from iteration to iteration, and the Court should accordingly adopt Microsoft’s proposed construction.

IV. CONCLUSION

For the foregoing reasons, Microsoft respectfully requests that this Court hold ParTec to its word by adopting claim constructions that reflect the positions ParTec took in its claims, its patents, and during prosecution, as Microsoft has proposed.

Dated: November 14, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing document was filed electronically on November 14, 2025. As of this date, all counsel of record have consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system.

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