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

PROCOMM INTERNATIONAL PTE. LTD., **Plaintiff,** **v.** **VERIZON COMMUNICATIONS, INC., CELLCO PARTNERSHIP D/B/A VERIZON, WIRELESS, TELEFONAKTIEBOLAGET LM ERICSSON, and ERICSSON INC.,** **Defendants.**	Case No. 2:24-cv-00009-RWS-RSP **JURY TRIAL DEMANDED**

PLAINTIFF PROCOMM INTERNATIONAL PTE. LTD.'S
OPENING CLAIM CONSTRUCTION BRIEF

TABLE OF CONTENTS

I. INTRODUCTION 1

II. TECHNOLOGY OVERVIEW 1

III. LEGAL STANDARDS 2

IV. ARGUMENT 4

A. U.S. Patent No. 8,583,100 4

1. "each remote wireless communication station having a co-located network layer router" ('100 Patent, claim 15) 4

2. "uplink RF sampled data" ('100 Patent, claim 19) 7

B. U.S. Patent No. 7,724,521 8

1. "convective opening" ('521 Patent, claim 14) 8

2. "a sealed environment" ('521 Patent, claim 14) 10

V. CONCLUSION 11

TABLE OF AUTHORITIES

Page(s)

Cases

3M Innovative Properties Co. v. Tredegar Corp.,
725 F.3d 1315 (Fed. Cir. 2013).....3

ACTV, Inc. v. Walt Disney Co.,
346 F.3d 1082 (Fed. Cir. 2003).....6

Broadcom Corp. v. Emulex Corp.,
732 F.3d 1325 (Fed. Cir. 2013).....9

Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.,
334 F.3d 1294 (Fed. Cir. 2003).....2, 3, 5

Comark Communications, Inc. v. Harris Corp.,
156 F.3d 1182 (Fed. Cir. 1998).....3

Elbex Video, Ltd. v. Sensormatic Electronics Corp.,
508 F.3d 1366 (Fed. Cir. 2007).....3

Harris Corp. v. IXYS Corp.,
114 F.3d 1149 (Fed. Cir. 1997).....7

Lecat's Ventriloscope v. MT Tool and Manufacturing,
283 F. Supp. 3d 702 (N.D. Ill. 2018).....7

Legends, Inc. v. Upper Deck Co. LLC,
No. H-09-3463, 2010 WL 4817050 (S.D. Tex. Nov. 17, 2010).....10, 11

Liebel-Flarsheim Co. v. Medrad, Inc.,
358 F.3d 898 (Fed. Cir. 2004).....3

Phillips v. AWH Corp.,
415 F.3d 1303 (Fed. Cir. 2005).....3, 4, 5, 11

Sunstone Information Defense, Inc. v. F5, Inc.,
No. 21-cv-09529, 2023 WL 2746762 (N.D. Cal. Mar. 30, 2023).....6

Thorner v. Sony Computer Enterntainment America LLC,
669 F.3d 1362 (Fed. Cir. 2012).....3, 6

University of Florida Research Foundation, Inc. v. Motorola Mobility, LLC,
3 F. Supp. 3d 1374 (S.D. Fla. 2014).....6

I. INTRODUCTION

Plaintiff Procomm International Pte. Ltd. ("Procomm") submits this brief in support of its proposed claim constructions for U.S. Patent Nos. 8,583,100 (the "'100 Patent") (Ex. 1), and 7,724,521 (the "'521 Patent") (Ex. 2). Defendants commit the classic fallacy of *Markman* arguments with their proposed constructions—trying to improperly narrow claim scope in an effort to manufacture infringement defenses were none exist. In doing so, Defendants violate multiple canons of claim construction: they seek to narrow terms by inserting language limiting the claims to disclosed embodiments, and they seek to insert limitations not supported by the claims or the specification to read out other disclosed embodiments. Defendants' proposals should be rejected, and Procomm's position that the terms do not require construction should be adopted.

II. TECHNOLOGY OVERVIEW

The inventions of the '100 Patent relate to wireless communication systems employing distributed base stations, such as in a Distributed Antenna System (DAS) for high speed data transmission. As discussed in the specification, the inventions of the '100 Patent provide for a modular, flexible wireless platform that can be easily adapted for use with different data transport mechanisms, frequency bands, communication technologies, and intelligence distribution. Ex. 1 at 2:26-30. More specifically, the '100 patent discloses methods and systems for transmitting wireless communication signals and data including a plurality of remote stations, transmitting/receiving RF signals via antennas of the remote stations, and sending transport signals through a network of remote wireless base stations. The claims of the '100 Patent cover specific improvements in the field of distributed wireless communications that go beyond what was well-understood, routine, and conventional to solve then-existing problems in the field. Because the

base station systems according to the ’100 Patent may be distributed, the patent describes many advances of “traditional centralized base station systems.” Ex. 1, 9:19-20. The ’100 Patent Specification describes the advantages of distributed base station systems, including that they may simplify and speed up the processing of wireless signals, reduce unnecessary network traffic, and provide reduced latencies by allowing signals to be routed through local hubs (*e.g.* remote stations) and may not require transmission to a central hub. *See, e.g.*, Ex. 1, 9:19-57. The ’100 Patent describes how the flexibility, modular platform and the ability to “modify the functionality of each remote unit allows the wireless platform to support centralized base stations and distributed base stations, either separately or concurrently.” *Id.* at 2:59-62.

The inventions of the ’521 Patent relate to systems and methods for cooling of telecommunications infrastructure equipment using a Venturi effect. As discussed in the specification, in the field of telecommunications, there is a trend to reduce both the size and the expense associated with infrastructure equipment while retaining all the functionality of legacy equipment, resulting in “thermal management challenges for dissipating heat generated by telecommunications infrastructure equipment.” Ex. 2 at 1:65-2:14. The inventions of the ’521 Patent address this problem by providing systems and methods for cooling electrical equipment housed within an enclosure having air flowing through a heatsink that include drawing a first ambient airflow across the convective openings of the heatsink, and drawing a second heated air from the convective openings of the heatsink using a Venturi-effect created by drawing the first airflow.

III. LEGAL STANDARDS

In construing patent claims, “the analytical focus must begin and remain centered on the language of the claims.” *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298

(Fed. Cir. 2003). Absent express intent to impart different meaning to the claims, the terms used by the patentee bear a heavy presumption that they carry their plain and ordinary meaning as understood by a person of ordinary skill in the art. *See Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1371 (Fed. Cir. 2007); *Brookhill-Wilk*, 334 F.3d at 1298.

In addition to the claim language itself, claims "must be read in view of the specification, of which they are a part." *Phillips v. AWH Corp.,* 415 F.3d 1303, 1315 (Fed. Cir. 2005). The specification "is always highly relevant to the claim construction analysis [and] is the single best guide to the meaning of a disputed term." *Id.* Where the specification demonstrates that the patentee has defined his own terms, the inventor's lexicography governs. *See id.* at 1316. However, "[t]o act as its own lexicographer, a patentee must 'clearly set forth a definition of the disputed claim term,' [and] 'clearly express an intent' to redefine the term." *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To disavow the full scope of a claim term, the patentee's statements in the specification or prosecution history must represent "a clear disavowal of claim scope." *Id.* at 1366. When "an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

"Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998). "[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).

Courts may consider extrinsic evidence if the "court deems it helpful in determining 'the true meaning of language used in the patent claims.'" *See Phillips* at 1317–18. But because extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms," it may not be used to contradict the intrinsic evidence. *See id.* at 1318.

IV. ARGUMENT

In this matter, Procomm has asserted that Defendants infringe certain claims of the Asserted Patents. Procomm believes that no terms in the patents-in-suit require construction, while Defendants argue that construction of multiple terms is necessary. As set forth below, Procomm's position that construction is not necessary is consistent with the intrinsic record and the fundamental principle of claim construction whereby claim terms "are generally given their ordinary and customary meaning." *Phillips*, 415 F.3d at 1312 (en banc). Because Procomm's positions "stay[] true to the claim language and most naturally align[] with the patent's description of the invention," *id.* at 1316, Procomm requests that the Court reject Defendants' overly narrow constructions and adopt Procomm's proposals.

A. U.S. Patent No. 8,583,100

1. "each remote wireless communication station having a co-located network layer router" ('100 Patent, claim 15)

Disputed Claim Term of Phrase	Plaintiff's Proposed Construction & Support	Defendants' Proposed Construction & Support
"each remote wireless communication station having a co-located network layer router" (claim 15)	Plain and ordinary meaning as informed by the intrinsic evidence; no construction necessary	"each remote wireless communication station having its own separate co-located network layer router"

The term "each remote wireless communication station having a co-located network layer router" need not be construed and uses words that should be readily understood to a fact finder.

The touchstone of claim construction is that terms are afforded their plain and ordinary meaning as understood by a person of ordinary skill in the art in view of the specification, unless there is ambiguity that a proposed construction resolves. *Phillips*, 415 F.3d at 1315. No such ambiguity exists in the term "each remote wireless communication station having a co-located network layer router"—and Defendants have not identified any—nor does Defendants' proposed construction provide greater clarity to the claim. The "language of the claim" itself, on which the Court's "analytical focus must begin and remain centered," *Brookhill-Wilk*, 334 F.3d at 1298, uses terms like "each" and "router," which are readily understood and need not be rewritten.

Defendants have no justification for their overly narrow construction. Defendants have not identified any alleged disclaimer and there is none. To the extent that Defendants intend to argue that the patentees acted as their own lexicographer, the specification does not provide an express definition of the term, let alone a definition that is the same as Defendants' construction.

The specification notes that the system includes a "modular platform" that is "made up of a reconfigurable host unit and a reconfigurable remote unit designed for use in a system with a central node and a plurality of distributed antennas." Ex. 1 at 2:30-33. The "host unit is located near the central node and facilitates transmission/reception of information to/from the remote units which are located remotely with an accompanying antenna." *Id.* at 2:33-36. "[E]ach antenna" is "coupled to a router." *Id.* at 1:43-46. Claim 15 specifies that each remote station has a "co-located network layer router." *Id.* at 12:15-16.

Defendants propose a construction under which each remote station must have its own ***separate*** co-located router. Defendants have not explained why its alleged description should be substituted for the plain meaning of the term "co-located network layer router" itself, or how that helps the fact finder. Regardless, Defendants' construction goes too far by improperly reading in

a limitation that each remote station have its own "separate" router. Crucially, nothing in the claims or the intrinsic record requires that "each remote wireless communication station" have its own separate router. The specification supports Procomm's position. For example, the specification teaches that the "[h]ost unit and remote unit have a modular design and defined interfaces that allow components to be removed and installed to adapt to the needs of the service providers." *Id.* at 1:40-42.

To the extent that Defendants' proposed construction attempts to improperly import a separate limitation from the embodiments in the specification, it should be rejected. Reading limitations from exemplary embodiments into claims that do not recite them is improper. Defendants have not met the "exacting" standards required to demonstrate that patentee redefined the limitations or otherwise disavowed their full scope. *Thorner*, 669 F.3d at 1366. Here, the specification makes clear that the disclosed embodiments are merely "illustrative" and that "other embodiments may be utilized." Ex. 2 at 2:60-65. Thus, the patent contains no "expressions of manifest exclusion or restriction." *Thorner*, 669 F.3d at 1366. The Court should reject Defendants' attempt to depart from the plain and ordinary meaning.

Moreover, Defendants' proposed construction is improper for the additional reason that its definition is circular and unhelpful. For example, Defendants' construction provides an interpretation of "co-located network layer router" that itself relies on the term "co-located." The use of such circular definitions is generally disfavored. *See, e.g.*, *Univ. of Fla. Rsch. Found. v. Motorola Mobility, LLC*, 3 F. Supp. 3d 1374, 1377 (S.D. Fla. 2014) (citing *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1090 (Fed. Cir. 2003) (finding the use of "wireless" to define "wireless" was "circular and unhelpful" and "constitute[d] improper claim construction.")); *Sunstone Info. Def., Inc. v. F5, Inc.*, No. 21-cv-09529, 2023 WL 2746762, at *6–*8 (N.D. Cal.

Mar. 30, 2023) (rejecting a construction of "presentation information" that included the term "presentation information" in its definition because it was circular). This type of "circular claim construction will not assist the jury as factfinder in understanding this claim term and determining whether the allegedly infringing product includes" the routers at issue. *Lecat's Ventriloscope v. MT Tool and Mfg.*, 283 F. Supp. 3d 702, 712 (N.D. Ill. 2018) (citing *Harris Corp. v. IXYS Corp.*, 114 F.3d 1149, 1152 (Fed. Cir. 1997)).

Replacing "each remote wireless communication station having a co-located network layer router" with "each remote wireless communication station having its own ***separate*** co-located network layer router" does not assist the jury in determining the meaning of the claim term. Accordingly, Defendants' proposed construction should be rejected.

2. "uplink RF sampled data" ('100 Patent, claim 19)

Disputed Claim Term of Phrase	Plaintiff's Proposed Construction & Support	Defendants' Proposed Construction & Support
"uplink RF sampled data" (claim 19)	Plain and ordinary meaning as informed by the intrinsic evidence; no construction necessary	"uplink data that has been converted from RF to digital"

Defendants' proposed construction of "uplink RF sampled data"— a term that is clear on its face — is too narrow for multiple reasons. Defendants seek to re-write this term without justification by requiring that sampled uplink data must be limited to data that is also fully digitized/converted to digital. But there is no requirement in the claims or the specification that sampled uplink data must also be fully digitized. Moreover, Defendants' proposed construction contradicts the plain and ordinary meanings of "sampling" and "digitization." A POSA would understand that digitization—*i.e.*, the process of "analog-to-digital (A/D) conversion"— "involves two processes: sampling (digitization in time) and quantization (digitization in amplitude)." Ex. 3

(*Practical Digital Signal Processing for Engineers and Technicians*, 2003, Chapter 2 "Converting analog to digital signals and vice versa") at ProcommEE_000961. Accordingly, as shown in Figure 2.1 of Exhibit 3, a POSA would understand that it is possible to have a "discrete-time signal"—*i.e.*, data that is ***sampled*** but not fully ***digitized***. *Id.* Claim 19 of the '100 patent specifies that the data is "sampled." But nothing in the claims or specification requires that such sampled data be fully digitized. Defendants' improper attempt to re-write the claim in contravention of its meaning should be rejected.

B. U.S. Patent No. 7,724,521

1. "convective opening" ('521 Patent, claim 14)[1]

Disputed Claim Term of Phrase	Plaintiff's Proposed Construction & Support	Defendants' Proposed Construction & Support
"convective opening" (claim 14)	Plain and ordinary meaning as informed by the intrinsic evidence; no construction necessary	"opening at the end of a structure configured to receive a convective fluid flow"

The '521 Patent specification discloses, *e.g.*, that "convective openings . . . comprise ***open voids that run the length of backplane*** 105 which promotes a natural convective heat transfer between the backplane 105 and the air of the environment surrounding an enclosure 100, some of which will naturally flow through convective openings 140 (illustrated in FIG. 2C)." Ex. 2 at 3:48-54 (emphasis added). Figure 2C illustrates convective opening 140, below. In particular, Figure 2C illustrates "a natural convection flow (shown generally at 250) to establish itself through the convective openings 140." *Id.* at 5:19-21.

[1] The parties dispute whether claim 19 of the '521 Patent is asserted in this case. Plaintiff has moved for leave to amend its contentions to include claim 19. Dkt. 46. The parties' *Markman* disputes with respect to this term is applicable to claim 19.

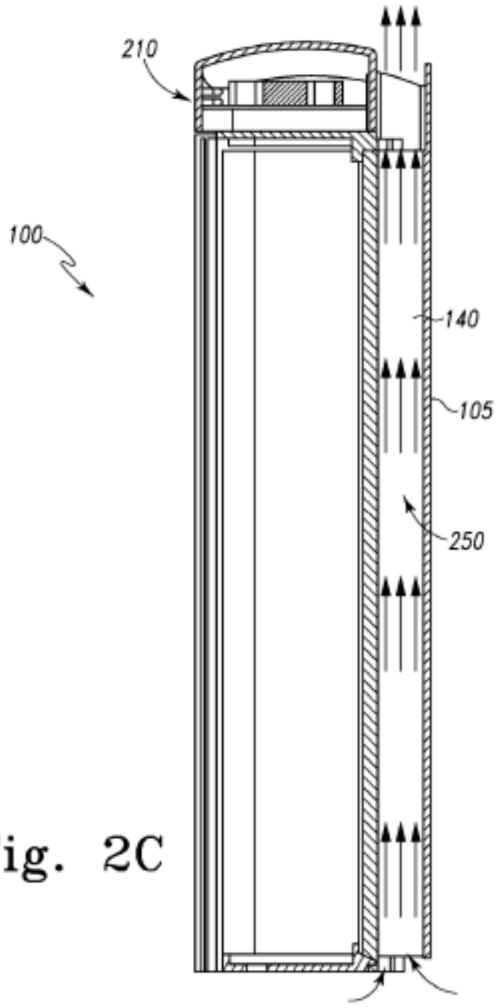

Fig. 2C

Defendants' proposed construction of "convective opening" is too narrow, and contradicts the intrinsic record. First, there is no there is no requirement in the claims or the specification that a "convective opening" be limited to only the "end of a structure." To the contrary—the intrinsic record teaches that the convective openings may include "open voids that run the length of backplane." Ex. 2 at 3:49-50. Defendants' construction, which is divorced from the specification and reads out embodiments should be rejected. *Broadcom Corp. v. Emulex Corp.,* 732 F.3d 1325, 1333 (Fed. Cir. 2013) ("This court has clarified that an interpretation which 'excludes a [disclosed] embodiment from the scope of the claim is rarely, if ever, correct.'"). Moreover, here the '521 Patent specification expressly refers to the ends of the "convective openings" as "the ***top openings***

of the ***convective openings*** 140." *Id.* at 4:33, 58. (emphasis added). Thus, the '521 Patent specification itself provides guidance that the "convective opening" limitation should be construed broadly in accordance with its plain and ordinary meaning. Had the patentee wished to limited the "convective opening" limitations to only "the top openings of the convective openings" it simply could have recited the same in the claims instead of the broader "convective opening" limitations. *See Legends, Inc. v. Upper Deck Co. LLC*, No. H-09-3463, 2010 WL 4817050, at *10 (S.D. Tex. Nov. 17, 2010) (refusing to limit scope of "database" to be a computer-only database but rather having it encompass any collection of information, the court noting that the specification described some embodiments as using a "computer database" while the claims themselves notable omitted the term "computer").

2. "a sealed environment" ('521 Patent, claim 14) [2]

Disputed Claim Term of Phrase	Plaintiff's Proposed Construction & Support	Defendants' Proposed Construction & Support
"a sealed environment" (claim 14)	Plain and ordinary meaning as informed by the intrinsic evidence; no construction necessary	"a closed environment that does not need to be weatherproof"

Defendants' construction of "a sealed environment"—again a term that is clear on its face — is too narrow. The method of '521 Patent claim 14 requires "directing heat generated by one or more electronic devices housed within a sealed environment of an enclosure to a heatsink thermally coupled to the environment." Ex. 2, cl. 14. The '521 Patent specification teaches that "[i]n one embodiment, the sealed environment is formed by closing one or more doors of an enclosure, such as enclosure 100 discussed above." *Id.* at 5:44-46. Further, the specification

[2] The parties dispute whether claim 19 of the '521 Patent is asserted in this case. Plaintiff has moved for leave to amend its contentions to include claim 19. Dkt. 46. The parties' *Markman* disputes with respect to this term is applicable to claim 19.

teaches that "[i]n other embodiments, other sealed environments may be used." *Id.* at 5:46-47.

There is no requirement in the claims or the specification that the sealed environment "does not need to be weatherproof." The '521 Patent specification discloses that various embodiments of sealed environments may be used, including "alternate embodiments . . . [that] provide a weatherproof sealed environment." *Id.* at 3:11-13. Defendant is attempting to read in a limitation from the specification as a claim requirement, which is a "cardinal sin" of claim construction. *Philips*, 415 F.3d at 1319-20. The term "sealed environment" need not be construed and should not be construed to incorporate various limitations from the specification.

V. CONCLUSION

Defendants violate well-established principles of claim construction by proposing constructions that contradict the intrinsic record. Procomm respectfully requests that the Court reject Defendants' proposed constructions in their entirety and adopt Procomm's proposal that the claims do not require construction or should be given plain meaning constructions.

Respectfully Submitted,

Dated: March 4, 2025

/s/ Timothy Gilman (with permission by Robert Christopher Bunt)

Robert Christopher Bunt
Texas State Bar No. 00787165
PARKER, BUNT & AINSWORTH, P.C.
100 E. Ferguson, Suite 418
Tyler, Texas 75702
Tel: (903) 531-3535
Email: rcbunt@pbatyler.com

Timothy K. Gilman
Reg. # 4232799, 1st Dept. / New York
Christopher M. Gerson
Reg. # 4595708, 2nd Dept. / New York
Natalie D. Lieber
Reg. # 4672762, 2nd Dept. / New York
Jonathan H. Koppell
Reg. # 5318233, 2nd Dept. / New York
SCHULTE ROTH & ZABEL LLP
919 Third Avenue
New York, New York 10022
Tel: 212-756-2000
Fax: 212-593-5955
Email: tim.gilman@srz.com
Email: chris.gerson@srz.com
Email: natalie.lieber@srz.com
Email: jonathan.koppell@srz.com

Attorneys for Plaintiff
Procomm International Pte. Ltd.

CERTIFICATE OF SERVICE

I certify that the foregoing document was filed electronically on March 4, 2025 pursuant to Local Rule CV-5(a) and has been served on all counsel who have consented to electronic service.

/s/ Natalie D. Lieber