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

PANOPTIS PATENT MANAGEMENT, LLC, et al.,	§	
	§	
v.	§	CASE NO. 2:16-CV-62-JRG-RSP
	§	
BLACKBERRY LTD., et al.	§	

CLAIM CONSTRUCTION
MEMORANDUM AND ORDER

On January 25, 2017, the Court held a hearing to determine the proper construction of disputed claim terms in United States Patents No. 6,865,191, 7,783,949, 8,064,919, and 8,199,792. Having reviewed the arguments made by the parties at the hearing and in their claim construction briefing (Dkt. Nos. 88, 90 & 91),[1] having considered the intrinsic evidence, and having made subsidiary factual findings about the extrinsic evidence, the Court hereby issues this Claim Construction Memorandum and Order. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005); *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015).

[1] Citations to documents (such as the parties' briefs and exhibits) in this Claim Construction Memorandum and Order refer to the page numbers of the original documents rather than the page numbers assigned by the Court's electronic docket unless otherwise indicated.

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I. BACKGROUND

Plaintiffs PanOptis Patent Management, LLC and Optis Wireless Technology, LLC ("Plaintiffs" or "PanOptis") have alleged infringement of United States Patents No. 6,865,191 ("the '191 Patent"), 7,783,949 ("the '949 Patent"), 8,064,919 ("the '919 Patent"), and 8,199,792 ("the '792 Patent") (collectively, the "patents-in-suit") by Defendants BlackBerry Limited and BlackBerry Corp ("Defendants" or "BlackBerry"). Plaintiffs submit that the patents-in-suit relate to wireless communications and in particular the LTE standard for high-speed data in wireless communications. Dkt. No. 88 at 1.

The Court previously construed terms in the '191 Patent, the '919 Patent, and the '792 Patent in *Optis Wireless Technology, LLC, et al. v. ZTE Corp., et al.*, 2:15-CV-300, Dkt. No. 116, 2016 WL 1599478 (E.D. Tex. Apr. 20, 2016) ("*ZTE*").

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with preliminary constructions with the aim of focusing the parties' arguments and facilitating discussion. Those preliminary constructions are set forth below within the discussion for each term.

II. LEGAL PRINCIPLES

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Claim construction is clearly an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). "In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the

background science or the meaning of a term in the relevant art during the relevant time period." *Teva*, 135 S. Ct. at 841 (citation omitted). "In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the 'evidentiary underpinnings' of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal." *Id.* (citing 517 U.S. 370).

To determine the meaning of the claims, courts start by considering the intrinsic evidence. *See Phillips*, 415 F.3d at 1313; *see also C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1314; *C.R. Bard*, 388 F.3d at 861. Courts give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312–13; *accord Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term's context in the asserted claim can be very instructive. *Id.* Other asserted or unasserted claims can aid in determining the claim's meaning because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* at 1315 (quoting *Markman*, 52 F.3d at 979 (en banc)). "[T]he specification 'is always highly

relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *accord Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor's lexicography governs. *Id.* The specification may also resolve the meaning of ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex*, 299 F.3d at 1325. But, "[a]lthough 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) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *accord Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent."). "[T]he prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance." *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985).

Although extrinsic evidence can be useful, it is "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Phillips*, 415 F.3d at 1317

(citations and internal quotation marks omitted). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are entirely unhelpful to a court. *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

III. THE PARTIES' STIPULATED TERMS

The parties reached agreement on constructions as stated in their November 4, 2016 P.R. 4-3 Joint Claim Construction and Prehearing Statement (Dkt. No. 85 at Ex. A) and their January 13, 2017 Joint Claim Construction Chart (Dkt. No. 96 at Ex. A). Those agreements are set forth in Appendix A to the present Claim Construction Memorandum and Order.

IV. CONSTRUCTION OF DISPUTED TERMS IN U.S. PATENT NO. 8,064,919

The '919 Patent, titled "Radio Communication Base Station Device and Control Channel Arrangement Method," issued on November 22, 2011, and bears an earliest priority date of March 23, 2007. The Abstract of the '919 Patent states:

> Provided is a radio communication base station device which can obtain a maximum frequency diversity effect of a downstream line control channel. The device includes: an RB allocation unit (101) which allocates upstream line resource blocks continuous on the frequency axis for respective radio communication mobile stations by the frequency scheduling and generates allocation information indicating which upstream line resource block has been allocated to which radio communication mobile station device; and an arrangement unit (109) which arranges a response signal to the radio communication mobile station device in the downstream line control channels

distributed/arranged on the frequency axis while being correlated to the continuous upstream line resource blocks according to the allocation information.

The Court previously construed terms in the '919 Patent in *ZTE*.

A. "a determination unit . . ." ('919 Pat., Cls. 1, 2)

"a determination unit configured to determine a resource of downlink, to which a response signal transmitted from the base station is mapped, from an index of the allocated resource block based on the allocation information"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. *See Optis Wireless Tech. et al. v. ZTE Corp.*, 2:15-cv-300-JRG-RSP, Dkt. 116, 51–55 (E.D. Tex.) ("ZTE CC Order") (holding "[determination unit] is not governed by 35 U.S.C. § 112, ¶6 and needs no further construction."). This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Fig. 5 (209), col. 4:13–15, 4:21–25, 6:8–20, 8:8–24, 22:26–48. Function: "to determine a resource of downlink, to which a response signal transmitted from the base station is mapped"	This term is subject to § 112(6). Function: determining a resource of downlink, to which a response signal transmitted from the base station is mapped, from an index of the allocated resource block based on the allocation information Structure: an integrated circuit, as described at col. 22:26–48, that implements the algorithm described in FIG. 3, in connection with mapping specifying section 209 of FIGS. 5, and at col. 4:13–15, 4:21–25, 6:8–20, 8:8–24

Dkt. No. 85, Ex. B at 11–12; Dkt. No. 88 at 2; Dkt. No. 90 at 7; Dkt. No. 96, Ex. A at 12–13.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (35 U.S.C. § 112, ¶ 6 does not apply)."

(1) The Parties' Positions

Plaintiffs argue that here as in *ZTE*, Defendants cannot overcome the presumption that this non-means term is not governed by 35 U.S.C. § 112, ¶ 6. Dkt. No. 88 at 4.

Defendants respond that "'determination unit' is not a term of art that refers to a specific type of circuit with a known structure," and "[t]he claim language does not describe how such a circuit would be 'specially configured' to perform the claimed function." Dkt. No. 90 at 8.

Plaintiffs reply that "unit" has not been found to be a "nonce" term, and the Court should reach the same conclusion here as in *ZTE*. Dkt. No. 91 at 1.

At the January 25, 2017 hearing, Defendants emphasized testimony by Plaintiffs' expert, Dr. Richard Gitlin, agreeing that the phrase "determination unit" is not a "general term of the art." Dkt. No. 90, Ex. 18, Dec. 19, 2016 Gitlin dep. at 32:4–7.

(2) Analysis

Title 35 U.S.C. § 112, ¶ 6 provided: "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."[2]

"[T]he failure to use the word 'means' . . . creates a rebuttable presumption . . . that § 112, para. 6 does not apply." *Williamson v. Citrix Online LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (citations and internal quotation marks omitted). "When a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites

[2] "Because the patents-in-suit were all filed before the effective date of the AIA [(America Invents Act)], pre-AIA 35 U.S.C. § 112 ¶ 6 is applicable, rather than new Section 112(f)." Dkt. No. 90 at 2 n.1; *see* Dkt. No. 88 at 3 n.3.

function without reciting sufficient structure for performing that function." *Id.* at 1349 (citations and internal quotation marks omitted).

Williamson, in an *en banc* portion of the decision, abrogated prior statements that the absence of the word "means" gives rise to a "strong" presumption against means-plus-function treatment. *Id.* (citation omitted). *Williamson* also abrogated prior statements that this presumption "is not readily overcome" and that this presumption cannot be overcome "without a showing that the limitation essentially is devoid of anything that can be construed as structure." *Id.* (citations omitted). Instead, *Williamson* found, "[h]enceforth, we will apply the presumption as we have done prior to *Lighting World . . . .*" *Id.* (citing *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004)). In a subsequent part of the decision not considered *en banc*, *Williamson* affirmed the district court's finding that the term "distributed learning control module" was a means-plus-function term that was indefinite because of lack of corresponding structure, and in doing so *Williamson* stated that "'module' is a well-known nonce word." 792 F.3d at 1350.

As to the "a determination unit . . ." term in the '919 Patent, *ZTE* found:

> In the claims of the '919 Patent "unit" is used in combination with a recitation of capability to denote structure. For instance, although the parties originally disputed whether "reception unit" and "transmission unit" are structural, Dkt. 66 at 36–37, the parties ultimately agreed that these terms did not need to be presented to the Court for construction, Dkt. No. 104-1. From this, the Court understands that there is no dispute that "reception unit" and "transmission unit" are structural.
>
> "Determination unit," like "reception unit" and "transmission unit," connotes structure. Even if the term "determination unit" does not in isolation connote sufficiently definite structure, the claim connotes structure to one of skill in the art by reciting details of how the unit functions as part of the claim. The claim states the objective of the "determination unit" is "to determine a resource of downlink." It further states the "determination unit" achieves this objective using "an index of the allocated resource block based on the allocation information" received by the

"reception unit." That is, the claim requires the "reception unit" be "configured to receive" the allocation information and requires the "determination unit" be "configured to determine" a resource of downlink from an index from the allocation information. So, together, the claims require the "determination unit" to be connected to the "reception unit" in such a way as to have access to the allocation information the "determination unit" uses to determine the resource of downlink. The claim also provides structure through the details of indices of the allocation information—"the indices of a plurality of the consecutive resource blocks are respectively associated with a plurality of the resources which are different in a frequency domain."

In the context of a mobile-communication-system patent and a claim to a "mobile station apparatus," the "determination unit" is a specially configured electronic circuit. For example, the patentee noted that although the exemplary embodiments are "configured by hardware," the unit may be an integrated circuit (e.g., LSI, IC), a programmed processor circuit, or a programmed logic circuit (e.g., FPGA). *See* '919 Patent col.22 ll.26–48. The Court recognizes the patentee noted that the particular circuit implementation is not limited to the then-known circuit-building technology—advancements in semiconductor technology or biotechnology may allow the circuit to be otherwise constructed—according to the objectives and operations of the "determination unit." *See* col.22 ll.44–48. But technology does not change the fundamental structure of the unit as a circuit.

Such a disclosure of the objectives of the "determination unit" and how the unit operates within the context of the claimed invention connotes sufficiently definite structure to one of skill in the art. *See Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319–21 (Fed. Cir. 2004) ("circuit [for performing a function]" found to be sufficiently definite structure because the claim recited the "objectives and operations" of the circuit); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1295, 1301 (Fed. Cir. 2014) ("heuristic [for performing a function]" found to be sufficiently definite structure in part because the claim described the operation and objectives of the heuristic); *Finjan, Inc. v. Proofpoint, Inc.*, . . . Case No. 13-cv-05808-HSG, 2015 WL 7770208, at *11 (N.D. Cal. Dec. 3, 2015) ("processor [for performing a function]" found to be sufficiently definite structure because the claim described how the processor functions with the other claim components); *SuperSpeed, LLC v. Google, Inc.*, Civil Action No. H-12-1688, 2014 WL 129225, at *22 (S.D. Tex. Jan. 14, 2014) (code for performing a function connotes sufficiently definite structure).

Accordingly, the Court finds that this term is not governed by 35 U.S.C. § 112, ¶ 6 and needs no further construction.

ZTE at 53–55 (footnote omitted).

Unlike *ZTE*, here the parties dispute whether "reception unit" and "transmission unit" are structural.

Nonetheless, the substantive analysis of "determination unit" in *ZTE* is still applicable here. Defendants have cited cases in which the Court has found certain "unit" terms to be means-plus-function terms governed by 35 U.S.C. § 112, ¶ 6. *See Cellular Commc'ns Equip. LLC v. HTC Corp.*, No. 6:13-CV-507, 2015 WL 10741012, at *12–*14 (E.D. Tex. Mar. 9, 2015);[3] *see also Saint Lawrence Commc'ns LLC v. ZTE Corp.*, No. 2:15-CV-349, 2016 WL 6275390, at *18–*19 (E.D. Tex. Oct. 25, 2016); *id.* at *21–*22. Those cases, however, addressed different terms that appeared in different contexts than the present disputed term. *See, e.g., id.*, at *19 ("Here, the disputed term recites a 'unit,' and the term is otherwise arranged in means-plus-function format. At the June 29, 2016 [claim construction] hearing, Plaintiff did not attempt to distinguish the above-discussed portions of *Williamson* and did not otherwise attempt to substantively rebut Defendants' argument that 35 U.S.C. § 112, ¶ 6 applies.").

On balance, the Court hereby expressly rejects Defendants' argument that the present disputed term is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6. Defendants have not proposed any construction other than pursuant to 35 U.S.C. § 112, ¶ 6. The Court therefore concludes that no further construction is required.

The Court thus hereby construes **"a determination unit . . ."** to have its **plain meaning**.

[3] The parties have cited a Westlaw version of this opinion that appears at 2016 WL 4204137, which indicates that the Memorandum Opinion and Order in *Cellular Communications Equipment* was entered by Judge Leonard Davis on August 9, 2016. The actual date of entry is March 9, 2015. *See* No. 6:13-CV-506, Dkt. No. 363 (E.D. Tex. Mar. 9, 2015). The proper March 9, 2015 date is correctly set forth at the end of 2016 WL 4204137, and a correctly dated version appears at 2015 WL 10741012. The Memorandum Opinion and Order in *Cellular Communications Equipment* was thus entered prior to the *Williamson* decision in June 2015. *Williamson*, 792 F.3d 1339. Nonetheless, this Court's analysis of the present disputed term remains the same.

B. "a reception unit . . ." ('919 Pat., Cl. 1)

"a reception unit configured to receive, from a base station, allocation information indicating one or a plurality of allocated resource block(s) of uplink, the resource blocks being consecutive in a frequency domain"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Fig. 5 (201, 202), col. 4:13–15, 4:21–25, 5:44–48, 22:26–48. Function: "to receive, from a base station, allocation information indicating one or a plurality of allocated resource block(s) of uplink"	This term is subject to § 112(6) Function: receiving, from a base station, allocation information indicating one or a plurality of allocated resource block(s) of uplink[4] Structure: an integrated circuit, as described at col. 22:26–48, that implements the algorithm described in connection with sections 202–208 and antenna 201 of FIG. 5 and at col. 4:13–15, 4:21–25, 5:44–6:7

Dkt. No. 85, Ex. B at 10; Dkt. No. 88 at 3; Dkt. No. 90 at 3; Dkt. No. 96, Ex. A at 11–12.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (35 U.S.C. § 112, ¶ 6 does not apply)."

(1) The Parties' Positions

Plaintiffs argue that Defendants cannot overcome the presumption that this non-means term is not governed by 35 U.S.C. § 112, ¶ 6. Dkt. No. 88 at 6. Plaintiffs submit that "[l]ike

[4] Defendants previously proposed: "receiving, from a base station, allocation information indicating one or a plurality of allocated resource block(s) of uplink, the resource blocks being consecutive in a frequency domain." *See* Dkt. No. 96, Ex. A at 11 n.4.

'determination unit,' the claimed 'reception unit' connotes structure to one of skill in the art by reciting details of how the unit functions as part of the claim." *Id.*

Defendants respond that this disputed term uses "unit" as a "nonce" word and fails to connote structure and, as a result, 35 U.S.C. § 112, ¶ 6 applies. Dkt. No. 90 at 4. Defendants urge that "[t]he plain language does not limit th[is] term[] to a 'receiver,'" and "the '919 patent never uses the term 'receiver.'" *Id.* at 5. Further, Defendants argue, "a 'receiver,' . . . is insufficient structure for the claimed function of 'receiv[ing], from a base station, allocation information indicating one or a plurality of allocated resource block(s) of uplink.'" *Id.*

Plaintiffs reply that "[Defendants'] attempt to distinguish between a transmission/reception unit and transmitter/receiver elevates form over substance." Dkt. No. 91 at 2.

At the January 25, 2017 hearing, the parties presented no separate oral argument as to this term apart from their arguments as to the "a determination unit . . ." term addressed above.

(2) Analysis

For substantially the same reasons set forth above as to "a determination unit . . .," the Court finds that the present disputed term is not governed by 35 U.S.C. § 112, ¶ 6.

The Court accordingly hereby expressly rejects Defendants' argument that the present disputed term is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6. Defendants have not proposed any construction other than pursuant to 35 U.S.C. § 112, ¶ 6. The Court therefore concludes that no further construction is required.

The Court thus hereby construes the **"a reception unit . . ."** term to have its **plain meaning**.

C. "a transmission unit . . ." ('919 Pat., Cl. 2)

"a transmission unit configured to transmit data using the allocated resource block(s) based on the allocation information"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Fig. 5 (201, 218), col. 4:13–15, 4:21–25, 6:58–63, 22:26–48. Function: "to transmit data using the allocated resource block(s) based on the allocation information"	This term is subject to § 112(6) Function: transmitting data using the allocated resource block(s) based on the allocation information Structure: an integrated circuit, as described at col. 22:26–48, that implements the algorithm described in FIG. 1, in connection with sections 214 and 218 and antenna 201 of FIGS. 5, and at col. 1:62–65, 4:13–15, 4:21–25, 6:36–41, 6:58–63, 7:1–3

Dkt. No. 85, Ex. B at 13; Dkt. No. 88 at 3; Dkt. No. 90 at 3; Dkt. No. 96, Ex. A at 13–14.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (35 U.S.C. § 112, ¶ 6 does not apply)."

(1) The Parties' Positions

Plaintiffs argue that Defendants cannot overcome the presumption that this non-means term is not governed by 35 U.S.C. § 112, ¶ 6. Dkt. No. 88 at 6. Plaintiffs submit that "[l]ike 'determination unit,' the claimed 'transmission unit' connotes structure to one of skill in the art by reciting details of how the unit functions as part of the claim." *Id.* at 7.

Defendants respond as to this term together with the "a reception unit . . ." term addressed above. *See* Dkt. No. 90 at 3–7. Defendants argue that "a 'transmitter' is insufficient structure for the claimed function of 'transmit[ting] data using the allocated resource block(s) based on the allocation information.'" *Id.* at 5.

Plaintiffs reply that "[Defendants'] attempt to distinguish between a transmission/reception unit and transmitter/receiver elevates form over substance." Dkt. No. 91 at 2.

At the January 25, 2017 hearing, the parties presented no separate oral argument as to this term apart from their arguments as to the "a determination unit . . ." term addressed above.

(2) Analysis

For substantially the same reasons set forth above as to "a determination unit . . .," the Court finds that the present disputed term is not governed by 35 U.S.C. § 112, ¶ 6.

The Court accordingly hereby expressly rejects Defendants' argument that the present disputed term is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6. Defendants have not proposed any construction other than pursuant to 35 U.S.C. § 112, ¶ 6. The Court therefore concludes that no further construction is required.

The Court thus hereby construes the **"a transmission unit . . ."** term to have its **plain meaning**.

V. CONSTRUCTION OF DISPUTED TERMS IN U.S. PATENT NO. 8,199,792

The '792 Patent, titled "Radio Communication Apparatus and Response Signal Spreading Method," issued on June 12, 2012, and bears an earliest priority date of June 15, 2007. The Abstract of the '792 Patent states:

> A wireless communication apparatus capable of minimizing the degradation in separation characteristic of a code multiplexed response signal. In this apparatus,

a control part (209) controls both a AC [*sic*] sequence to be used in a primary spreading in a spreading part (214) and a Walsh sequence to be used in a secondary spreading in a spreading part (217) so as to allow a very small circular shift interval of the ZC sequence to absorb the interference components remaining in the response signal; the spreading part (214) uses the ZC sequence set by the control part (209) to primary spread the response signal; and the spreading part (217) uses the Walsh sequence set by the control part (209) to secondary spread the response signal to which PC has been added.

The Court previously construed terms in the '792 Patent in *ZTE*.

D. "a spreading unit . . ." ('792 Pat., Cls. 1, 3, 4, 6, 12, 14, 20, 21)

"a spreading unit configured to spread an ACK or NACK with an orthogonal sequence, which is one of plural orthogonal sequences, and with a sequence defined by a cyclic shift value, which is one of plural cyclic shift values and which is associated with the orthogonal sequence"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Fig. 6 (214, 217), col. 7:30–40, 7:45–48, 7:56–60, 14:5–29. Function: "to spread an ACK or NACK with an orthogonal sequence . . . and with a sequence defined by a cyclic shift value"	This term is subject to 112([6]) Function: spreading an ACK or NACK with an orthogonal sequence, which is one of plural orthogonal sequences, and with a sequence defined by a cyclic shift value, which is one of plural cyclic shift values and which is associated with the orthogonal sequence Structure: an integrated circuit, as described at col. 14:9–27, implementing the algorithm described in FIG. 1, in connection with sections 214–217 of FIG. 6, and at col. 1:47–64, 7:45–60

Dkt. No. 85, Ex. B at 15–16; Dkt. No. 88 at 9.

Plaintiffs argued that Defendants cannot overcome the presumption that this non-means term is not governed by 35 U.S.C. § 112, ¶ 6. Dkt. No. 88 at 10. Plaintiffs submitted that "[t]he

claimed 'spreading unit' connotes structure to one of skill in the art by reciting details of how the unit functions as part of the claim." *Id.*

Defendants responded: "After further consideration of PanOptis's brief and expert declaration, BlackBerry agrees that the term 'spreading unit' does not need construction, and is not subject to § 112 ¶ 6." Dkt. No. 90 at 12; *see id.* at 12 n.6 ("Although the term 'unit' is a nonce word, the term 'spreading unit' differs from the other 'unit' terms addressed in this brief.").

Plaintiffs replied: "Blackberry no longer seeks construction of 'a spreading unit.' Accordingly, PanOptis does not address the term herein." Dkt. No. 91 at 2 n.3 (citation omitted).

Because this term is thus no longer disputed, the Court does not further address this term.

E. "a transmitting unit . . ." ('792 Pat., Cls. 1, 3, 4, 6, 12, 14, 20, 21)

"a transmitting unit configured to transmit the ACK or NACK"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Fig. 6 (218), col. 7:61–65, 14:5–27. Function: "to transmit the ACK or NACK"	This term is subject to § 112(6) Function: transmitting the ACK or NACK Structure: an integrated circuit, as described at col. 14:5–27,[5] implementing the algorithm described in connection with section 218 and antenna 201 of FIG. 6 and at col. 7:61–65

Dkt. No. 85, Ex. B at 17; Dkt. No. 88 at 9; Dkt. No. 90 at 12; Dkt. No. 96, Ex. A at 17–18.

[5] Defendants previously proposed: "14:9-27." *See* Dkt. No. 96, Ex. A at 17 n.6.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (35 U.S.C. § 112, ¶ 6 does not apply)."

(1) The Parties' Positions

Plaintiffs argue that Defendants cannot overcome the presumption that this non-means term is not governed by 35 U.S.C. § 112, ¶ 6. Dkt. No. 88 at 11. Plaintiffs submit that "[t]he claimed 'transmission unit' connotes structure to one of skill in the art by reciting details of how the unit functions as part of the claim." *Id.* at 12.

Defendants respond that "the term 'transmitting unit' merely uses a nonce term with functional descriptions." Dkt. No. 90 at 12. Defendants argue that, similar to the "transmission unit" term in the '919 Patent, "the claims contain no structure for performing the recited function." *Id.* at 13. Further, Defendants argue, "the '792 patent claims a 'transmitting unit,' not a 'transmitter.'" *Id.*

Plaintiffs reply: "Again, [Defendants] elevate[] form over substance by trying to distinguish a 'transmitting unit' from a transmitter." Dkt. No. 91 at 3.

At the January 25, 2017 hearing, the parties presented no separate oral argument as to this term apart from their arguments as to the "a determination unit . . ." term addressed above.

(2) Analysis

For substantially the same reasons set forth above as to "a determination unit . . ." in the '919 Patent, the Court finds that the present disputed term is not governed by 35 U.S.C. § 112, ¶ 6.

The Court accordingly hereby expressly rejects Defendants' argument that the present disputed term is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6. Defendants have

not proposed any construction other than pursuant to 35 U.S.C. § 112, ¶ 6. The Court therefore concludes that no further construction is required.

The Court thus hereby construes the **"a transmitting unit . . ."** term to have its **plain meaning**.

F. "[is/are] different from" ('792 Pat., Cls. 1, 3, 4, 6, 8–10, 12–17, 22)

Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning.	cannot be the same as

Dkt. No. 85, Ex. B at 15; Dkt. No. 88 at 12; Dkt. No. 90 at 9; Dkt. No. 96, Ex. A at 19.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (Reject Defendants' proposal of 'cannot be the same as')."

(1) The Parties' Positions

Plaintiffs argue: "The plain claim language requires only that one or more cyclic shift values associated with one orthogonal sequence is different from one or more cyclic shift values associated with another. Blackberry's proposed construction, in contrast, requires that none of the cyclic shift values associated with one orthogonal sequence be the same as any cyclic shift value associated with another orthogonal sequence." Dkt. No. 88 at 14.

Defendants respond that "[t]he patent consistently teaches this 'difference' as every cyclic shift value associated with a given orthogonal sequence is unique compared to values associated with a second orthogonal sequence." *See* Dkt. No. 90 at 10 (citing '792 Patent at Figs. 7, 10, 12, 13).

Plaintiffs reply: "The independent claims require that '*a* cyclic shift value associated with the first orthogonal sequence *is different from a* cyclic shift value associated with the second orthogonal sequence,' but BlackBerry argues that as [*sic*] *each cyclic shift* value is *unique to a particular orthogonal sequence*." Dkt. No. 91 at 3 (emphasis Plaintiffs').

At the January 25, 2017 hearing, Defendants urged that the specification discloses three distinct embodiments that correspond to Figures 7–10, 11–12, and 13–14, respectively, and Defendants argued that only the second embodiment is claimed. In response, Plaintiffs acknowledged that the specification sets forth no embodiment with partial overlap of cyclic shift values, but Plaintiffs maintained that the claims contain no limitation that would preclude partial overlap.

(2) Analysis

The specification discloses that using different cyclic shift values can reduce loss of performance that would otherwise be caused by inter-code interference:

> Thus, in FIG. 7, ZC sequences are cyclically shifted by one every time the Walsh sequence number increases by one. That is, in the present embodiment, the minimum difference is 1 between the cyclic shift values of ZC sequences associated with adjacent Walsh sequences. In other words, in FIG. 7, adjacent Walsh sequences are associated with ZC sequences, cyclic shift values of which are different, and used for two-dimensional spreading for response signals. Therefore, even when inter-code interference between Walsh sequences occurs due to the collapse of orthogonality between the Walsh sequences, it is possible to suppress inter-code interference by spreading using ZC sequences. For example, referring to FIG. 7, a response signal that is transmitted using PUCCH #4 is subjected to two-dimensional spreading using ZC #1 and W #1, and a response signal that is transmitted using PUCCH #7 is subjected to two-dimensional spreading using ZC #2 and W #2. *Therefore, even when inter-code interference between W #1 and W #2 occurs due to the collapse of orthogonality between W #1 and W #2, it is possible to suppress the inter-code interference by a slight difference between the cyclic shift values of ZC #1 and ZC #2*.
>
> On the other hand, in FIG. 7, like ZC #1 and ZC #2, ZC sequences, cyclic shift values of which are adjacent, that is, ZC sequences, between which the cyclic shift value difference is "1," are used. By this means, orthogonality between ZC

sequences may collapse, which causes inter-code interference between the ZC sequences. However, in FIG. 7, ZC sequences, between which a cyclic shift value difference is "1," are associated with different Walsh sequences and used for two-dimensional spreading of response signals. Therefore, even when inter-code interference between ZC sequences occurs due to the collapse of orthogonality between the ZC sequences, it is possible to suppress inter-code interference by spreading using Walsh sequences. For example, referring to FIG. 7, a response signal that is transmitted using PUCCH #4 is subjected to two-dimensional spreading using ZC #1 and W #1, and a response signal that is transmitted using PUCCH #7 is subjected to two-dimensional spreading using ZC #2 and W #2. *Therefore, even when inter-code interference between ZC #1 and ZC #2 occurs, it is possible to suppress inter-code interference by the difference between the sequences of W #1 and W #2.*

Thus, the present embodiment absorbs the collapse of orthogonality on the Walsh axis (i.e. inter-code interference between Walsh sequences), on the cyclic shift axis, and absorbs the collapse of orthogonality on the cyclic shift axis (i.e. inter-code interference between ZC sequences), on the Walsh axis. In other words, the present embodiment compensates inter-code interference between Walsh sequences caused by the collapse of orthogonality between the Walsh sequences, by the spreading gain of ZC sequence, and compensates inter-code interference between ZC sequences caused by the collapse of orthogonality between the ZC sequences, by the spreading gain of Walsh sequence. Therefore, according to the present embodiment, it is possible to minimize degradation of the separation performance of code-multiplexed response signals.

'792 Patent at 9:1–57 (emphasis added).

Claim 4 of the '792 Patent, for example, recites (emphasis added):

4. A radio communication apparatus comprising:

a spreading unit configured to spread an ACK or NACK with an orthogonal sequence, which is one of plural orthogonal sequences, and with a sequence defined by a cyclic shift value, which is one of plural cyclic shift values and which is associated with the orthogonal sequence; and

a transmitting unit configured to transmit the ACK or NACK,

wherein:

each of the plural orthogonal sequences is expressed as [W_0, W_1, W_2, W_3];

the plural orthogonal sequences include a first orthogonal sequence and a second orthogonal sequence, wherein [W_0, W_1] of the first orthogonal sequence and [W_0, W_1] of the second orthogonal sequence are not orthogonal, and [W_2, W_3] of the first orthogonal sequence and [W_2, W_3] of the second orthogonal sequence are not orthogonal; and

> a cyclic shift value associated with the first orthogonal sequence *is different from* a cyclic shift value associated with the second orthogonal sequence.

The claims do not preclude an orthogonal sequence from having more than one cyclic shift value associated with it. For example, dependent Claim 8 recites (emphasis added):

> 8. The radio communication apparatus according to claim 4, wherein:
> the plural cyclic shift values include a plurality of first cyclic shift values and a plurality of second cyclic shift values that *are different from* the plurality of first cyclic shift values; and
> the first orthogonal sequence is associated with the plurality of first cyclic shift values, and the second orthogonal sequence is associated with the plurality of second cyclic shift values.

Defendants' proposal of "cannot be the same as" would mean that in above-reproduced Claim 4, for example, a cyclic shift value associated with the first orthogonal sequence cannot be the same as *any* cyclic shift value associated with the second orthogonal sequence.

Defendants have not demonstrated anything in the claim language that would preclude partial overlap between cyclic shift values associated with the first orthogonal sequence and cyclic shift values associated with the second orthogonal sequence. Likewise, no disclaimer to such effect is evident in the specification. *See Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1366–67 (Fed. Cir. 2012) ("It is . . . not enough that the only embodiments, or all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that. To constitute disclaimer, there must be a clear and unmistakable disclaimer."); *see also Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 908 (Fed. Cir. 2004) ("The fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives.").

As to the prosecution history cited by Defendants, which appears in the file history of the parent United States Patent Application No. 13/165,538 (which issued as United States Patent No. 8,179,947), the patentee argued as follows regarding the "Kwak" reference, United States Patent No. 7,929,415:

> . . . Kwak et al. describes using 6 ZC sequences and W-H-codes having a length 2 to obtain "a maximum of 12 two-dimensional orthogonal codes," meaning that Kwak et al. is associating *each* of the 6 cyclic shift values with *each* of the 2 orthogonal (W-H) codes to obtain 12 different codes, as in a round-robin arrangement. (*See*, Col. Col. [*sic*] 7, lines 4–15 of Kwak et al.) Kwak et al. nowhere teaches or suggests associating *a different cyclic shift value with each of two of the plural orthogonal sequences* or associating *each of adjacent cyclic shift values with a different orthogonal sequence*, as in various exemplary embodiments of the present invention. In fact, according to various embodiments of the present invention, if 6 ZC sequences and 2 W-H codes are used as in the example of Kwak et al., a maximum number of two-dimensional codes obtainable would be 6, not 12 as in Kwak et al.

Dkt. No. 90, Ex. 16, Sept. 28, 2011 Response at 5 (POWIRE62_0000101) (emphasis in original).

The patentee thus distinguished Kwak as disclosing complete overlap. That is, the patentee distinguished Kwak because Kwak associated all of the same cyclic shift values (the 6 ZC sequences) with both of the two orthogonal sequences (the 2 W-H codes). Plaintiffs here are not proposing that such complete overlap is within the scope of the claims at issue. Instead, Plaintiffs persuasively argue that there is no limitation precluding partial overlap. *See Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive* statements made during prosecution.") (emphasis added).

The Court therefore hereby expressly rejects Defendants' proposed construction. No further construction is necessary. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and

technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy."); *see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) ("[D]istrict courts are not (and should not be) required to construe every limitation present in a patent's asserted claims."); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) ("Unlike *O2 Micro*, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); *ActiveVideo Networks, Inc. v. Verizon Commcn's, Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012); *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015).

The Court accordingly hereby construes **"[is/are] different from"** to have its **plain meaning**.

VI. CONSTRUCTION OF DISPUTED TERMS IN U.S. PATENT NO. 7,783,949

The '949 Patent, titled "Method and Apparatus for Controlling a Transport Format of a Retransmission," issued on August 24, 2010, and bears an earliest priority date of April 1, 2004. The Abstract of the '919 Patent states:

> The present invention relates to a method for transmitting data packets from a mobile terminal to a base station using a hybrid automatic repeat request protocol and soft combining of received data. Further, the present invention provides a base station and a mobile terminal both adapted to perform the respective method steps. Moreover, a communication system is provided which comprises at least one base station and at least one mobile terminal. The present invention also provides a computer-readable medium for storing instructions that, when executed on a processor, cause the processor to transmit data packets from a mobile terminal to a base station using a hybrid automatic repeat request protocol and soft combining of received data. In order to restrict the interference caused by retransmissions, the present invention suggests controlling the amount of information in the retransmissions and thus the transmission power required for their transmission by TFCS restriction.

G. "transmitting unit . . ." ('949 Pat., Cl. 18) and "receiving unit . . ." ('949 Pat., Cls. 18, 21)

"transmitting unit that transmits an uplink data packet via the uplink data channel from the transmitting apparatus"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Fig. 1 (103), col. 3:13, 17:27–31, 17:33–35, 18:27–36. Function: "transmits an uplink data packet via the uplink data channel from the transmitting apparatus"	This term is subject to § 112(6) Function: transmits an uplink data packet via the uplink data channel from the transmitting apparatus Structure: a computing device, as described at col. 18:27–36, implementing the algorithm described in FIG. 4, 5, 11, in connection with steps 1201, 1208, 1209, 1211, and 1212 of FIG. 12 and user equipment 103 of FIG. 1, and at 3:13–14, 4:27–46, 15:57–65, 16:5–13, 17:27–30, 17:47–52, 18:8–13

"receiving unit that receives a feedback message via an acknowledgment channel from the receiving apparatus, wherein the feedback message indicates whether the uplink data packet has been successfully received by the receiving apparatus"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Fig. 1 (103), col. 3:13, 17:27–31, 17:33–35, 18:27–36. Function: "receives a feedback message via an acknowledgment channel from the receiving apparatus"	This term is subject to § 112(6) Function: receives a feedback message via an acknowledgment channel from the receiving apparatus[6] Structure: a computing device, as described at col. 18:27–36, implementing the algorithm described in FIG. 4, 5, 11, in connection with steps 1207 and 1210 of FIG. 12 and user equipment 103 of FIG. 1, and at 3:13–14, 4:27–46, 15:65–16:4, 17:47–18:7.

Dkt. No. 85, Ex. B at 4–5 & 6–7; Dkt. No. 88 at 16–17; Dkt. No. 90 at 22; Dkt. No. 96, Ex. A at 4–6.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (35 U.S.C. § 112, ¶ 6 does not apply)."

[6] Defendants previously proposed: "receives a feedback message via an acknowledgment channel from the receiving apparatus, wherein the feedback message indicates whether the uplink data packet has been successfully received by the receiving apparatus." *See* Dkt. No. 96, Ex. A at 5 n.2.

(1) The Parties' Positions

Plaintiffs argue that Defendants cannot overcome the presumption that these non-means terms are not governed by 35 U.S.C. § 112, ¶ 6. Dkt. No. 88 at 17.

Defendants respond that "[a]s with 'transmission unit' and 'reception unit' in the '919 patent, the terms 'transmitting unit' and 'receiving unit' merely use a nonce term with functional descriptions . . . ." Dkt. No. 90 at 23. Defendants further argue: "Even if 'transmitting unit' and 'receiving unit' are understood to connote a generic 'transmitter' and a 'receiver,' those terms do not recite structure sufficient for performing the specific claimed functions at issue, *i.e.*, 'transmit[ting] an uplink data packet via the uplink data channel from the transmitting apparatus' and 'receiv[ing] a feedback message via an acknowledgment channel from the receiving apparatus.'" *Id.* at 24.

Plaintiffs reply that "[a]s with the similar terms in the other patents, [Defendants'] attempts to distinguish a transmitting/receiving unit from a transmitter/receiver elevates form over substance." Dkt. No. 91 at 7.

At the January 25, 2017 hearing, the parties presented no separate oral argument as to these terms apart from their arguments as to the "a determination unit . . ." term addressed above.

(2) Analysis

For substantially the same reasons set forth above as to "a determination unit . . ." in the '919 Patent, the Court finds that the present disputed terms are not governed by 35 U.S.C. § 112, ¶ 6.

The Court accordingly hereby expressly rejects Defendants' argument that the present disputed terms are means-plus-function terms governed by 35 U.S.C. § 112, ¶ 6. Defendants

have not proposed any constructions other than pursuant to 35 U.S.C. § 112, ¶ 6. The Court therefore concludes that no further construction is required.

The Court thus hereby construes the **"transmitting unit . . ."** and **"receiving unit . . ."** terms to have their **plain meaning**.

H. "scheduling related control channel" ('949 Pat., Cls. 1, 18, 21), "acknowledg[e]ment channel" ('949 Pat., Cls. 1, 18, 21), and "data packet[s]" ('949 Pat., Cls. 1, 9, 18, 21)

"scheduling related control channel"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning.	an information stream on top of the MAC layer for transferring scheduling related control information
"acknowledg[e]ment channel"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning.	an information stream on top of the MAC layer for transferring acknowledgments
"data packet[s]"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning.	an information unit identified by a label at layer 3 of the OSI reference model

Dkt. No. 85, Ex. B at 1; Dkt. No. 88 at 18; Dkt. No. 90 at 14, 16 & 17; Dkt. No. 96, Ex. A at 1 & 2.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary constructions:

Term	Preliminary Construction
"scheduling related control channel"	"logical channel for scheduling-related control information"
"acknowledg[e]ment channel"	"logical channel for acknowledgements"
"data packet[s]"	"group of bits that convey source address, destination address, error checking, and a data payload"

At the January 25, 2017 hearing, the parties agreed to the Court's preliminary constructions.

The Court therefore hereby construes the disputed terms as set forth in the following chart:

Term	Construction
"scheduling related control channel"	**"logical channel for scheduling-related control information"**
"acknowledg[e]ment channel"	**"logical channel for acknowledgements"**
"data packet[s]"	**"group of bits that convey source address, destination address, error checking, and a data payload"**

I. "transport format for a retransmission" ('949 Pat., Cls. 1, 18)

Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning.	a transport format sufficient but not more than required for successfully decoding the uplink data packet using a retransmission

Dkt. No. 85, Ex. B at 4; Dkt. No. 88 at 21; Dkt. No. 90 at 18; Dkt. No. 96, Ex. A at 1.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (Reject Defendants' proposal of 'sufficient but not more than required')."

Plaintiffs argued that Defendants' proposal "reads out some of the disclosed embodiments." Dkt. No. 88 at 22. Further, Plaintiffs argued, Defendants' proposal "imports unnecessary ambiguity into the claims regarding how one would measure that which is 'sufficient but not more than required for' successful decoding." *Id.* Instead, Plaintiffs argued, the specification demonstrates that "one of ordinary skill would understand that a 'transport format for a retransmission' is simply a restricted transport format, specifying the modulation scheme, code rate, etc., to be used in retransmission." *Id.* at 23. Plaintiffs also argued claim differentiation as to dependent Claim 7. *Id.* at 25.

Defendants responded that their proposed construction "reflects the alleged invention and the patent's disparagement of prior art methods." Dkt. No. 90 at 18. Defendants submitted that the patent "teaches precisely what restriction must be indicated to the UE in order to achieve the alleged benefits of the invention." *Id.* at 19. Defendants argued that "the '949 patent expressly describes how to determine a transport format that is sufficient, but not more than required." *Id.* at 21 (citing '949 Patent at 16:29–34).

Plaintiffs replied that "there is no disavowal justifying BlackBerry's proposed departure from plain meaning." Dkt. No. 91 at 7.

At the January 25, 2017 hearing, Plaintiffs reiterated that Defendants' proposed construction would inappropriately demand a level of precision that is not feasible, as demonstrated by the evidence discussed in the parties' briefs. Plaintiffs highlighted the opinion

of Plaintiffs' expert that the disputed term "transport format for a retransmission" refers to a "restricted" transport format. *See* Dkt. No. 88, Ex. 6, Dec. 7, 2016 Gitlin Decl. at ¶ 86.

In response, Defendants presented an alternative proposed construction: "transport format restricted relative to the original transmission for a retransmission."

Plaintiffs replied that Defendants' alternative proposal was needlessly wordy. Nonetheless, Plaintiffs stated that if the Court finds that construction is appropriate, then Plaintiffs had no substantive objection to Defendants' alternative proposal.

On balance, the Court finds that construction is appropriate so as to reflect the substantive agreement reached by the parties at the January 25, 2017 hearing.

The Court therefore hereby construes **"transport format for a retransmission"** to mean **"transport format restricted relative to the original transmission for a retransmission."**

VII. CONSTRUCTION OF DISPUTED TERMS IN U.S. PATENT NO. 6,865,191

The '191 Patent, titled "System and Method for Sending Multimedia Attachments to Text Messages in Radiocommunication Systems," issued on March 8, 2005, and bears an earliest priority date of August 12, 1999. The Abstract of the '191 Patent states:

> Methods and systems for transmitting attachments to text messages without turning terminals into e-mail clients are described. When an attachment is to be transmitted, an address of an attachment server is appended to the text message. The text message is then forwarded to the intended recipient, e.g., via an SMS server, while the attachment is sent to the attachment server. Upon receipt of the text message, the recipient can then download the attachment from the attachment server using the address included in the text message.

The Court previously construed terms in the '191 Patent in *ZTE*.

J. "a processor . . ." ('191 Pat., Cl. 17)

"a processor for associating a text message with an attachment"	
Plaintiffs' Proposed Construction	**Defendants' Proposed Construction**
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. This claim term should not be governed by 35 U.S.C. § 112(6). But, should the Court determine that this claim term should be governed by 35 U.S.C. § 112(6), then PanOptis identifies that one or more of the following structure(s), act(s), or materials correspond to this claim term: Structure: Figs. 5 (180), col. 5:33–36, 5:43–48 Function: "associating a text message with an attachment"	This term is subject to 112(6) Function: "associating a text message with an attachment"[7] Structure: a processor that performs one or more of the algorithms disclosed in col. 5:43–48

Dkt. No. 85, Ex. B at 19; Dkt. No. 88 at 25–26; Dkt. No. 90 at 25; *id.* at 26 n.16; Dkt. No. 96, Ex. A at 36.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (35 U.S.C. § 112, ¶ 6 does not apply)."

(1) The Parties' Positions

Plaintiffs argue that Defendants cannot overcome the presumption that this non-means term is not governed by 35 U.S.C. § 112, ¶ 6. Dkt. No. 88 at 26. Plaintiffs urge that "[a]

[7] Defendants previously proposed: "associating a text message with an attachment, the text message being addressed to a receiving terminal having a phone number associated with it, the addressing being based on the phone number of the receiving terminal, and for adding information to the text message that identifies a server." Dkt. No. 85, Ex. B at 19.

'processor' is the name of a specific structure or class of structures known to one of skill in the art at the time the '191 patent was filed." *Id.*

Defendants respond that "the 'processor' term of the '191 patent is defined only according to the function it performs, and does not connote structure," and "while claim 17 recites the function performed by the processor—*i.e.*, 'associating a text message with an attachment'—it does not describe how the processor performs that function." Dkt. No. 90 at 26.

Plaintiffs reply that surrounding claim language and the specification demonstrate that the disputed term is structural. Dkt. No. 91 at 9.

(2) Analysis

Legal principles regarding 35 U.S.C. § 112, ¶ 6 are set forth above as to the "a determination unit . . ." term in the '919 Patent.

Claim 17 of the '191 Patent recites (emphasis added):

> 17. A mobile station comprising:
>
> *a processor* for associating a text message with an attachment, the text message being addressed to a receiving terminal having a phone number associated with it, the addressing being based on the phone number of the receiving terminal, and for adding information to the text message that identifies a server; and
>
> a transceiver for sending the attachment to a server and for transmitting the text message to the receiving terminal's phone number based address.

Here, "processor" is not a "nonce" term but rather connotes a class of structures. In reaching this conclusion, the Court applies substantially the same analysis that the Court applied in *SyncPoint Imaging, LLC v. Nintendo of America Inc.*, No. 2:15-CV-247, 2016 WL 55118, at *18–*21 (E.D. Tex. Jan. 5, 2016). In particular, the Court hereby expressly rejects Defendants' arguments that the "processor" term fails to recite sufficient structure because the claim "does not describe how the processor performs that function" and that "mere disclosure of a generic data processor cannot denote sufficient structure with respect to the functions performed." Dkt.

No. 90 at 26 & 27; *see Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) ("where a claim is not drafted in means-plus-function format, the reasoning in the *Aristocrat* line of cases does not automatically apply, and an algorithm is therefore not necessarily required") (discussing *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328 (Fed. Cir. 2008)). Furthermore, whether recitation of a "processor for" performing a function is governed by § 112, ¶ 6 depends on whether the stated objectives and operation of the processor connote sufficiently definite structure. *Global Equity Management (SA) Pty. Ltd. v. Expedia, Inc.*, No. 2:16-cv-95, 2016 WL 7416132, at *29 (E.D. Tex. Dec. 22, 2016); *Uniloc USA, Inc. v. Autodesk, Inc.*, No. 2:15-cv-1187, 2016 WL 3647977, at *20 (E.D. Tex. July 7, 2016); *See, e.g., Finjan, Inc. v. Proofpoint, Inc.*, No. 13-cv-05808-HSG, 2015 U.S. Dist. LEXIS 162504, at *31–*32, 2015 WL 7770208 (N.D. Cal. Dec. 3, 2015) ("processor [for performing a function]" found to be sufficiently definite structure because the claim described how the processor functions with the other claim components); *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319–21 (Fed. Cir. 2004) ("circuit [for performing a function]" – similar to "processor [for performing a function]" – found to be sufficiently definite structure because the claim recited the "objectives and operations" of the circuit).

Here, the term "processor" as used in Claim 17 of the '191 Patent refers to a recognized class of structures. *See* Dkt. No. 88, Ex. 8, *Hargrave's Communications Dictionary* 410 (2002) ("In a computer, the functional unit that interprets and executes instructions. A processor consists of at least an instruction control unit and an arithmetic unit.") (POWIRE62_0020260); *see also id., Merriam-Webster Dictionary* 394 (2005) ("CPU") (POWIRE62_0020294); *id., McGraw-Hill Dictionary of Scientific and Technical Terms* 1676 (6th ed. 2003) ("1. A device that performs one or many functions, usually a central processing unit. Also known as engine. 2.

A program that transforms some input into some output, such as an assembler, compiler, or linkage editor.) (POWIRE62_0020270).

Finally, although Defendants have cited *St. Isidore Research, LLC v. Comerica Inc.*, No. 2:15-CV-1390, 2016 WL 4988246, at *14 (E.D. Tex. Sept. 19, 2016), in which the Court found certain "processor configured" terms to be means-plus-function terms, *St. Isidore* itself noted that "[t]he Court has typically found 'processor' to connote sufficient structure to avoid the application of § 112, ¶ 6 in different circumstances." *Id.*, at *15. Here, Claim 17 of the '191 Patent (reproduced above) sets forth detail regarding the operation of the "processor." *See, e.g., Linear Tech.*, 379 F.3d at 1320. Surrounding claim language recites more than merely "associating a text message with an attachment," such as "adding information to the text message that identifies a server" and "sending the attachment to a server." This context imparts additional structural significance and understandability to the "processor." Also of note, "[t]he amount of detail required to be included in claims depends on the particular invention and the prior art." *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011) (citation and internal quotation marks omitted).

On balance, the Court hereby expressly rejects Defendants' argument that the present disputed term is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6. Defendants have not proposed any construction other than pursuant to 35 U.S.C. § 112, ¶ 6. The Court therefore concludes that no further construction is required.

The Court thus hereby construes the **"a processor . . ."** term to have its **plain meaning**.

K. "sending the attachment to a server and . . . transmitting the text message to the receiving terminal's phone number based address" ('191 Pat., Cl. 17)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
No construction necessary. PanOptis proposes that the term be construed in accordance with its plain and ordinary meaning. *See also* ZTE CC Order, at 36–44 (holding each term "has its plain and ordinary meaning, and does not need further construction.").	routing the attachment to a server using a first communications protocol, and . . . routing the text message to a receiving terminal using a different communications protocol based on the receiving terminal's phone number Alternatively: routing the attachment to a server using a first transport mechanism, and . . . routing the text message to a receiving terminal using a different transport mechanism based on the receiving terminal's phone number

Dkt. No. 85, Ex. B at 20; Dkt. No. 88 at 28; Dkt. No. 90 at 28; *id.* at 30 n.19; Dkt. No. 96, Ex. A at 36–37.

Shortly before the start of the January 25, 2017 hearing, the Court provided the parties with the following preliminary construction: "Plain meaning (Reject Defendants' proposal of requiring 'different communications protocol[s]' or 'different transport mechanism[s]')."

(1) The Parties' Positions

Plaintiffs argue that "BlackBerry's proposed construction improperly imports limitations into the claim and unnecessarily exchanges words." Dkt. No. 88 at 28. In particular, Plaintiffs argue that "Claim 17 does not require use of a particular protocol, much less two different protocols as BlackBerry's proposed construction would insert." *Id.* at 29.

Defendants respond that their proposal "reflects the express teaching in the specification, that the claimed system transmits text messages using a first transport protocol, such as SMS [(Short Message Service)], and sends attachments using a second protocol, such as WAP [(Wireless Access Protocol)]." Dkt. No. 90 at 28. Further, Defendants argue: "[I]n the *ZTE*

case, the dispute centered over whether the claims require two separate transmissions (rather than merely the use of two communication protocols), and whether the text message must actually reach the receiving terminal. *See ZTE* Order at 42–43. The Court has not had the opportunity to consider and rule on the issues presented by the parties in this case." *Id.* at 29.

Plaintiffs reply: "Blackberry erroneously attempts to read in limitations from the specification to support its construction, contrary to the plain language of the claims and statements in the file history." Dkt. No. 91 at 10 (footnote omitted).

(2) Analysis

Claim 17 of the '191 Patent recites, in relevant part:

> 17. A mobile station comprising:
>
> . . .
>
> a transceiver for sending the attachment to a server and for transmitting the text message to the receiving terminal's phone number based address.

In *ZTE*, the Court found:

> [T]he Court rejects Defendants' proposal to require the server-identifying information be inserted into the user-readable content of the text message. As set forth above, the Court does not understand a "text message" to be only user-readable text. And the Court does not understand the plain meaning of "adding information to the text message" to necessarily require that the information be inserted into the user-readable content of the message. * * *
>
> With respect to "sending the attachment to a server" and "transmitting the text message to the receiving terminal's phone number based address," the Court finds that these limitations do not require the attachment and text message be sent from the mobile separately or that the text message actually reach the receiving terminal. Even if the exemplary embodiments show the attachment and text message separately issuing from the mobile, that alone is not sufficient to read the limitation into the claims. . . .
>
> Further, the Court does not understand separately reciting sending and transmitting means that they must be distinct. *See, e.g.*, *In re Kelley*, 305 F.2d 909, 915–16 (C.C.P.A. 1962) ("The fact that one or more structural elements performing more than one function are common to the mechanisms which are recited separately in the claims does not prevent the claims from being sufficiently supported by the disclosure."); *Intellectual Prop. Dev., Inc. v.*

> *UA-Columbia Cablevision of Westchester, Inc.*, 336 F.3d 1308,[]1320 n.9 (Fed. Cir. 2003) ("we see no reason why, as a matter of law, one claim limitation may not be responsive to another merely because they are located in the same physical structure"); *Powell v. Home Depot*, 663 F.3d 1221, 1231–32 (Fed. Cir. 2011) (rejecting the argument that a claim "can only be infringed by a device that has separate structures corresponding to the distinct claim elements"). Indeed, Claim 20, which depends from Claim 17, indicates the attachment may be "transmitted *with* the text message." '191 Patent col.8 ll.62–65 (emphasis added). Critically, the Court does not find the invention addresses the failings of the prior art by sending the message and the attachment independently from the mobile. Rather, the invention teaches that [*sic*] the text message and attachment reaching the recipient via different paths.

ZTE at 42–43. The Court construed "sending the attachment to a server" and "transmitting the text message to the receiving terminal's phone number based address" to have their plain meaning. *Id.* at 44.

The Court in *ZTE* thus found a requirement of "different paths." *Id.* at 43. *ZTE* did not involve any dispute as to whether those different paths must use "different communications protocol[s]" or "different transport mechanism[s]," as Defendants have proposed here. Dkt. No. 90 at 28; *id.* at 30 n.19.

Defendants argue that "[e]very embodiment in the '191 patent teaches that the claimed system transmits text messages and sends attachments using distinct protocols for transport." Dkt. No. 90 at 28 (citing '191 Patent at 3:6–11, 5:20–36 & 6:15–17). No such requirement of using distinct protocols for transport is apparent in the claim language, and Defendants have not identified any relevant definition or disclaimer that would support Defendants' proposal. *See Thorner*, 669 F.3d 1366–67 ("It is . . . not enough that the only embodiments, or all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that. To constitute disclaimer, there must be a clear and unmistakable disclaimer."). On the contrary, the specification implies that the transport mechanisms are not limited to the arrangement set forth in the preferred

embodiment because "the present invention can also be applied where other types of equipment originate the message, e.g., PSTNs or data networks." '191 Patent at 7:13–15.

The prosecution history cited by Defendants is likewise unavailing in this regard. The patentee stated that "attachments can be processed by the terminals using the existing text messaging protocols, such as SMS, without using an email client." Dkt. No. 90, Ex. 17, June 30, 2004 Amendment at 6 (POWIRE62_0001633). This does not rise to the level of a definitive statement that the claimed invention is limited to the protocols used in the preferred embodiment or that different transport mechanisms must be used for the text message and the attachment respectively. *See Omega Eng'g*, 334 F.3d at 1324 ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive* statements made during prosecution.") (emphasis added).

Also of note, Claims 4 and 12 of the '191 Patent recite, respectively: "wherein transmitting the text message and receiving the attachment are performed using wireless access protocol (WAP)"; and "wherein the means for transmitting a message and for receiving the attachment employ wireless access protocol (WAP)." Although Claims 4 and 12 do not depend from the claim here at issue, the absence of any analogous protocol limitation in Claim 17 of the '191 Patent is noteworthy. *See Phillips*, 415 F.3d at 1314 ("Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.").

The Court therefore hereby expressly rejects Defendants' proposed construction. No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362; *Finjan*, 626 F.3d at 1207; *ActiveVideo*, 694 F.3d at 1326; *Summit 6*, 802 F.3d at 1291.

The Court accordingly hereby construes **"sending the attachment to a server and . . . transmitting the text message to the receiving terminal's phone number based address"** to have its **plain meaning**.

VIII. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit.

The parties are ordered to not refer to each other's claim construction positions in the presence of the jury. Likewise, in the presence of the jury, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court. The Court's reasoning in this order binds the testimony of any witnesses, and any reference to the claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 6th day of February, 2017.

ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE

APPENDIX A

Term	Parties' Agreement
"the response signal is mapped to the subcarrier group" ('919 Patent, Claims 1, 10)	The response signal is mapped to the subcarrier group that comprises the determined resource of downlink.
"means for querying a user of the mobile station regarding whether the attachment is to be transmitted with the text message" ('191 Patent, Claim 20)	This claim term is governed by 35 U.S.C. § 112(6) and the parties identify one or more of the following structure(s), act(s), or materials that correspond to this claim term: Structure: Fig. 2 (Item 22), col. 5:4–19. *See* ZTE CC Order, at 44–48. Function: querying a user of the mobile station regarding whether the attachment is to be transmitted with the text message.

Dkt. No. 85 at Ex A; Dkt. No. 96, Ex. A at 13 & 37–38.