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

REALTIME DATA LLC D/B/A IXO,	**§**	
	§	
Plaintiff,	**§**	**CIVIL ACTION NO. 6:17-CV-00084-JDL**
	§	
v.	**§**	
	§	
ECHOSTAR CORPORATION, HUGHES NETWORK SYSTEMS, LLC,	**§**	
	§	
Defendants.	**§**	

MEMORANDUM OPINION AND ORDER

This claim construction opinion construes the disputed claim terms in U.S. Patent Nos. 7,358,867 ("the '867 Patent"); 8,502,707 ("the '707 Patent"); 9,054,728 ("the '728 Patent"); and 8,717,204 ("the '204 Patent"). Plaintiff Realtime Data LLC ("Realtime" or "Plaintiff") alleges that Defendants EchoStar Corp and Hughes Network Systems, LLC (collectively "Defendants") infringe the '728 Patent, the '867 Patent, the '707 Patent, and the '204 Patent. Plaintiff filed an opening claim construction brief (Doc. No. 91), to which Defendants filed a responsive brief (Doc. No. 93), and Plaintiff filed a reply (Doc. No. 96). The Parties additionally submitted a Joint Claim Construction Chart pursuant to P.R. 4-5(d). (Doc. No. 99.) On April 5, 2018, the Court held a claim construction hearing. Upon consideration of the parties' arguments, and for the reasons stated herein, the Court adopts the constructions set forth below.

OVERVIEW OF THE PATENTS

Plaintiff alleges Defendants infringe certain asserted claims of the '728 Patent, the '867 Patent, the '707 Patent, and the '204 Patent. Plaintiff states that the '728 Patent, the '867 Patent, and the '707 Patent are part of the "content compression" family. (Doc. No. 91 at 2.) Plaintiff

alleges that the "patents are directed to systems and methods of digital-data compression utilizing different techniques based on the specific content of the data." *Id.* Plaintiff maintains that the patents utilize data within a data block and identify one or more parameters of the content of that data.

The '728 and '707 Patents are entitled "Data Compression Systems and Methods." The '728 Patent claim 1 is representative of the claims set forth:

> 1. A system for compressing data comprising;
> a processor;
> one or more content dependent data compression encoders; and
> a single data compression encoder;
> wherein the processor is configured:
> to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block;
> to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and
> to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified.

The '707 Patent claim 1 is representative of the claims set forth:

> 1. A method comprising: receiving a data block in a received form; performing a first compression technique comprising:
> compressing said data block in received form with a first encoder to provide a first compressed data block, and
> compressing said first compressed data block with a second encoder to provide a second compressed data block;
> comparing said second compressed data block against a threshold, wherein said threshold is indicative of data expansion; and
> providing said second compressed data block to a device, if no data expansion is determined to have occurred based

on said comparing.

The ’867 Patent is entitled “Content Independent Data Compression Method and System.” Claim 1 is representative, and states:

> 1. A method comprising:
> receiving as input a data stream comprising at least one data block;
> compressing said data block with a plurality of encoders;
> determining the encoder from said plurality of encoders that achieved the highest compression ratio;
> providing a compressed data block from the encoder from said plurality of encoders that achieved the highest compression ratio; and
> providing a data compression type descriptor, representative of the encoder that provided the highest compression ratio, with said compressed data block.

The ’204 Patent is a “data transmission” patent, and it “relates generally to systems and method for providing data transmission, and in particular, to systems and method for providing accelerated transmission of data[.]” ’204 Patent, 1:25–29. Claim 1 is representative of the ’204 Patent, and recites:

> 1. A method for processing data, the data residing in a data field, comprising:
> recognizing any characteristic, attribute, or parameter of the data;
> selecting an encoder associated with the recognized characteristic, attribute, or parameter of the data;
> compressing the data with the selected encoder to create compressed data wherein the compressing achieves a compression ratio of over 10:1 on the data; and
> broadcasting the compressed data to a plurality of clients.

LEGAL STANDARD

“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 v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381

F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent's intrinsic evidence to define the patented invention's scope. *Id.* at 1313–14; *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312-13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003). Claim language guides the Court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). "[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.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex. Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced*

Cardiovascular Sys., Inc., 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve 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, Inc.*, 299 F.3d at 1325. For example, "[a] claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct." *Globetrotter Software, Inc. v. Elan Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of 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."). The well-established doctrine of prosecution disclaimer "preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." *Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002); *see also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir.

2003) ("The disclaimer . . . must be effected with 'reasonable clarity and deliberateness.'") (citations omitted)). "Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover." *Spectrum Int'l v. Sterilite Corp.*, 164 F.3d 1372, 1378-79 (Fed. Cir. 1988) (quotation omitted). "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." *Omega Eng'g, Inc.*, 334 F.3d at 1324.

Although "less significant than the intrinsic record in determining the legally operative meaning of claim language," the Court may rely on extrinsic evidence to "shed useful light on the relevant art." *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful." *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

In patent construction, "subsidiary fact finding is sometimes necessary" and the court "may have to make 'credibility judgments' about witnesses." *Teva v. Sandoz*, 135 S.Ct. 831, 838 (2015). In some cases, "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." *Id.* at 841. "If a district court resolves a dispute between experts and makes a factual finding that, in general, a

certain term of art had a particular meaning to a person of ordinary skill in the art at the time of the invention, the district court must then conduct a legal analysis: whether a skilled artisan would ascribe that same meaning to that term *in the context of the specific patent claim under review*." *Id.* (emphasis in original). When the court makes subsidiary factual findings about the extrinsic evidence in consideration of the "evidentiary underpinnings" of claim construction, those findings are reviewed for clear error on appeal. *Id.*

DISCUSSION

The parties dispute the meaning of the following claim terms, which are set forth herein:

I. DISPUTED CLAIM TERMS

A. "content dependent data compression encoders" / "content dependent data compression" (the '728 Patent, Claims 1, 5, 9, and 25)

Plaintiff's Proposal	Defendants' Proposal
"content dependent data compression" means compression using one or more encoders selected based on the encoder's (or encoders') ability to effectively encode the data type or content of the data block	[encoder(s) / compression] that is applied to input data that is not compressed with [a single data compression encoder / the single data compression encoder], the compression using one or more encoders selected based on the encoder's (or encoders') ability to effectively encode the data type or content of the data block

Plaintiff states that the preferred embodiment of this claim term does not prohibit data compressed with "content dependent" compression from being also compressed with "single data compression" or vice versa. (Doc. No. 91 at 7.) Plaintiff argues that the additional language in Defendants' proposed construction "is inconsistent with the plain meaning and the intrinsic evidence." *Id.* Defendants argue that "[p]roper construction of this term requires that an uncompressed input data be compressed with either one of two possible sets of encoders defined in the claim language—but never both," and Defendants cite prior cases involving Plaintiff where similar constructions were accepted. (Doc. No. 93 at 5–6.) Defendants also cite

claim language as well as disclosures in the specification that support its position that there is a "single data compression encoder." *Id.* at 7–13. Plaintiff replies that Defendants "seek[] to import a limitation that is not directed to the compression or encoder, but is instead an extraneous restriction on the input data to which it is applied." (Doc. No. 96 at 1.) Plaintiff argues that "[t]he claims plainly *do not* exclude a situation where that input data was already compressed with another encoder . . . before or after the content dependent compression is applied to that input data." *Id.* at 1–2 (emphasis in original).

Upon review, the Court finds that the Plaintiff's proposal is correct. The '728 Patent shows that it performs data compression "with one or more content data compression encoders if the one or more parameters or attributes of the data are identified[.]" '728 Patent at 26:29–32. It does not limit the claim to only non-compressed data, and there is no evidence Plaintiff intended to limit the type of data.

The specification allows for receiving data that has been encoded before it is received. The disclosure regarding Figures 15A and 15B, which the parties have cited and discussed, refers back to Figures 13A and 13B. *See* '728 Patent at 20:51–56. The written description regarding Figures 13A and 13B states that "[t]he data compression system comprises a counter module 10 that receives as input an uncompressed or *compressed* data stream." '728 Patent at 16:3–5 (emphasis added). Figures 15A and 15B, like Figures 13A and 13B, illustrate a "Data Stream" as an input to a data block counter. The specification thus contemplates that the disclosed compression operations may be performed upon data that has already been compressed.

Defendants argue that Figures 16A and 16B, which relate to Figures 15A and 15B, are evidence that the input data is not encoded because it states in the detailed description that "[i]f there are no encoded data blocks having a compression ratio that exceeds the compression ratio

threshold limit (negative determination in step 1620), then *the original unencoded input data block* is routed to the content independent encoder[.]" (Doc. No. 93 at 9 (emphasis in original)) (citing '728 Patent at 22:38–47). Although this disclosure describes a scenario where the data block is unencoded, Figures 16A and 16B are disclosed as being an illustration of "a" mode of operation of the system. '728 Patent at 20:61–66. Moreover, the '728 Patent claims are all "comprising" claims, which can encompass additional features so long as the recited limitations are satisfied. *See Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1371–72 (Fed. Cir. 2005). As noted above, the accompanying disclosure regarding Figures 13A and 13B notes that the input may be a "compressed data stream." '728 Patent at 16:3–5.

At the April 5, 2018 hearing, Defendants attempted to distinguish this disclosure regarding a "compressed data stream" by arguing that the parties' dispute does not concern the input to the counter 10 in Figure 15A but rather concerns the line between the threshold test and the content independent encoders in Figure 15B. Defendants thus attempted to reemphasize the disclosure that "the original unencoded input data block is routed to the content independent encoder." '728 Patent at 22:41–47. Yet, Defendants did not adequately address this argument, because the specification suggests that the "original unencoded input data block" may already have been compressed as part of the input data stream. *Id.* at 16:3–5, 22:41–47. The Court therefore finds that there is no evidence that precludes data that was compressed with "content dependent" compression from also being compressed with some other compression or vice versa.

Finally, although in prior cases Plaintiff agreed to phrasing similar to what Defendants have proposed here for claims 1 and 25 of the '728 Patent, Defendants have not demonstrated that any estoppel applies. First, the *Rackspace* and *NetApp* cases Defendants rely on involved an agreed-upon claim construction from Plaintiff. *Realtime Data, LLC v. Rackspace US, Inc.*, No.

6:16-cv-961, Dkt No. 183, at 35 (E.D. Tex. Jun. 14, 2017); *NetApp, Inc. v. Realtime Data LLC*, IPR2017-01354, Paper No. 12, at 9 (PTAB Aug. 15, 2017). Further, the *Actian* claim construction proceedings cited by Defendants involved different issues as to the claims of a different patent. *See Realtime Data LLC v. Actian Corp.*, Case No. 6:15-CV-463 ("*Actian*"), Doc. No. 362 at 20–21 (E.D. Tex. Jul. 28, 2016). Upon review of the parties' arguments, the Court finds the claims should be construed so that "content dependent data compression" means "compression using one or more encoders selected based on the encoder's (or encoders') ability to effectively encode the data type or content of the data block."

B. "one or more data compression encoders" / "one or more encoders" (the '728 Patent, Claim 24)

Plaintiff's Proposal	**Defendants' Proposal**
No construction necessary	[encoder(s) / compression] that is applied to input data that is not compressed with [a default data compression encoder / the default data compression encoder], the compression using one or more encoders selected based on the encoder's (or encoders') ability to effectively encode the data type or content of the data block

Plaintiff asks for no construction on this claim term, and maintains that the language of the patent is appropriate to show that there is "one or more [data compression] encoders" in the construction. (Doc. No. 91 at 8.) Defendants argue that the claim shows that there is a mutually exclusive relationship where "[a]n encoder cannot simultaneously be both 'default' and 'selected' based on its ability to encode data type or content." (Doc. No. 93 at 13.) Defendants maintain that their proposal is consistent with the Court's other prior constructions of "closely related terms featuring similar mutually exclusive relationships between two sets of encoders in a single claim." *Id.* at 15. Plaintiff replies that Defendants' construction should be rejected because it puts extraneous limitations into plain phrases. (Doc. No. 96 at 5.)

The terms "one or more data compression encoders" and "one or more encoders" present substantially the same dispute addressed above as to the "content dependent data compression" terms. For the reasons discussed above, evidence presented does not support the finding that the claims are limited as Defendants argue. In addition, unlike Claim 1 of the '728 Patent, Claim 24 does not recite the term "content dependent." This omission demonstrates that Plaintiff did not intend to limit the terms in the manner urged by Defendants. The terms plain meaning describe the system where one or more encoders are used to compress data. '728 Patent 28:12–30 (detailing the system where the data block is compressed with one or more encoders based on their parameters or attributes). Having resolved the parties' dispute, the claim terms "one or more data compression encoders" and "one or more encoders" do not require further construction.

C. "a single data compression encoder" / "the single data compression encoder" (the '728 Patent, Claims 1, 6, 10, 24, and 25)

Plaintiff's Proposal	Defendants' Proposal
No construction necessary	an encoder that is applied to input data that is not compressed with [content dependent data compression encoders / content dependent data compression], the compression applied without regard to the encoder's ability to effectively encode the data type or content of the data block. Alternatively, the [a single data compression encoder / the single data compression encoder] is an encoder used automatically in the absence of a designated alternative.

Plaintiff maintains that the plain and ordinary meaning of the terms are clear, and nothing in the plain meaning indicates that the terms are equivalent to "content independent" compression, nor is there any intrinsic evidence establishing this. (Doc. No. 91 at 9–10.) Defendants argue that their proposed construction is necessary, as shown from prior agreements for this construction. (Doc. No. 93 at 16.) Defendants state that the written description shows

that there is a mutually exclusive relationship between the first set of compression encoders and the second set of compression encoder, and the proposed construction clarifies the difference. *Id.* at 17. Plaintiff maintains the construction should be rejected because it imports improper limitations and there is no showing these encoders are independent. (Doc. No. 96 at 5–6.)

Similar to above, Defendants have not shown how the use of the term "single" specifically relates to the written descriptions reciting "content independent." Here, the terms describe a scenario where the data compression uses a single data compression encoder, and omits the term "content independent." *See, e.g.*, '724 Patent at 26:29–48 ("A system for compressing data comprising; a processor; one or more content dependent data compression encoders; and a single data compression encoder[.]"). This demonstrates that Plaintiff did not intend to limit the terms in the manner urged by Defendants. Further, although Defendants argues its proposal is similar to prior constructions, the Court notes again that the prior constructions were agreed-to or did not involve the '728 Patent specifically. (*See* Doc. Nos. 93-2, 93-3, 93-5.) Limiting the claims so that "single" means "content independent" would therefore be improper. Having resolved the parties' dispute, the terms "a single data compression encoder" and "the single data compression encoder" require no further construction.

D. "compressing said second data block with at least one second encoder" (the '707 Patent, Claim 22)

Plaintiff's Proposal	**Defendants' Proposal**
No construction necessary	encoder(s) that is / are applied to a data block that is not compressed with any associated encoder

Plaintiff argues that this is a straightforward phrase that does not require construction, and Defendants seek to rewrite the simple claim language and import an extraneous term. (Doc. No. 91 at 13–14.) Defendants maintain that the construction is consistent with the intrinsic

evidence showing mutually exclusive encoders. (Doc. No. 93 at 23.) Defendants state that the claim is "silent as to how data is compressed in the event that the determined data type is not associated with an encoder," and the construction fills the gap. *Id.* at 24. Plaintiff argues that this is a stretch on the intrinsic evidence, and that the negative limitation proposed by Defendants cannot be imposed in the absence of an express disclaimer. (Doc. No. 96 at 7.) Plaintiff maintains that the claims do not require mutual exclusivity. *Id.*

This term presents substantially the same dispute addressed above. As discussed above, the Court rejects Defendants' mutual exclusivity argument. Having resolved the parties' dispute, the Court finds that this term needs no further construction.

E. "determining whether or not to compress each one of said plurality of data blocks" (the '867 Patent, Claims 16 and 17)

Defendants stated that they "drop[] [their] dispute with [Plaintiff] regarding the phrase 'determining whether or not to compress each one of said plurality of data blocks,' as used in '867 claim 16." (Doc. No. 93 at 29 n.11.) Further, Claim 17 depends from Claim 16 and does not separately recite this term. The Court therefore need not further address this term.

F. "compressing the data with the selected encoder" (the '204 Patent, Claim 12)

Plaintiff's Proposal	**Defendants' Proposal**
No construction necessary	compressing . . . with the single selected encoder

Defendants argue that their proposed construction is consistent with the intrinsic evidence. (Doc. No. 93 at 24–25.) Defendants note that claim 12 of the '204 Patent requires "'compressing ***the*** data with ***the*** selected encoder' using a state machine." *Id.* (emphasis Defendants') (citing '204 Patent at 23:55–67). Defendants also emphasize that the claim "refers to only a single 'compressing[.]'" *Id.* at 25. Defendants further note that the claim uses "at least

one" to indicate the use of multiple machines, and Defendants argue that the patentee deliberately did not use that language when referring to "an encoder." *Id.* In its reply, Plaintiff argues that there is no reason to add the term "the single selected encoder" to the present disputed term because "the entire dispute is really about a different claim term: 'selecting an encoder.'" (Doc. No. 96 at 9–10.) Plaintiff also points out that the surrounding claim language indicates that "the claim is directed to greater compression and faster performance—and those goals may be achieved using multiple encoders." *Id.* at 10.

Claim 12 states that it is a method of "selecting an encoder associated with the recognized characteristic, attribute, or parameter of the data; [and] compressing the data with the selected encoder utilizing at least one state machine to provide compressed data[.]" '204 Patent at 23:59–62. Although the claim recites only a single "compressing," the antecedent basis for "the selected encoder" is "an encoder" in its previous step. The claim does not restrict this "selecting" to one and only one encoder. In claim construction, the indefinite article "a" typically means "one or more." *See Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342–43 (Fed. Cir. 2008) ("That "a" or "an" can mean "one or more" is best described as a rule, rather than merely as a presumption or even a convention."). The phrase "the selected encoder" therefore, in turn, also encompasses both singular and plural. *Id.* ("The subsequent use of definite articles "the" or "said" in a claim to refer back to the same claim term does not change the general plural rule, but simply reinvokes that non-singular meaning.").

Defendants fail to demonstrate that a singular meaning is compelled by "the context in which the article [('a')] is used." *See Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999). Claim term differentiation as to the separate usage of "at least one" in the claim does not override the general rule that "a" means "one or more." Finally, Defendants cite a disclosure

in the specification as support for interpreting "an encoder" to mean one encoder (*see* '204 Patent at 15:25–28). The portion of the specification Defendants cite to is a specific feature of particular preferred embodiments that should not be imported into the claim. *See* '204 Patent 14:57–15:51 (detailing a "content-independent data compression system [] that *may* be employed herein." (emphasis added)). Therefore, the Court expressly rejects Defendants' argument that compressing with "an encoder" indicates that this must be a single encoder.

Having resolved the parties' dispute, the Court finds that no further construction is necessary.

II. AGREED CLAIM TERM CONSTRUCTIONS

The parties submitted the following agreed-upon constructions:

Term/Phrase	**Agreed Construction**
"data block(s)" **('728, claims 1, 2, 9, 10, 15, 20, 24, 25; '707, claims 16, 17, 21, 22, 26, 27, 29, 30; '867, claims 16, 17, 31, 32)**	"a single unit of data, which may range in size from individual bits through complete files or collection of multiple files."
"compressing / compressed / compression" **('204, claims 12, 13, 20; '728, claims 1, 4, 5, 6, 9, 10, 15, 20, 24, 25; '707, claims 16, 17, 22, 29, 30; '867, claims 16, 17)**	"[representing / represented / representation] of data with fewer bits"
"data" **('204, claims 12, 13, 14, 20, 21; '728, claims 1, 2, 5, 6, 9, 10, 15, 20, 24, 25; '707, claims 16, 17, 21, 22, 26, 27, 29, 30; '867, claims 16, 17, 31, 32)**	"a representation of information"
"analyze / analyzing" **('728, claims 1, 24, 25; '204, claim 21)**	"directly examine / directly examining"

"a default data compression encoder / the default data compression encoder" **('728, claim 24)**	"the [a default data compression encoder / the default data compression encoder] is an encoder used automatically in the absence of a designated alternative"
"decompress / decompressing" **('204, claim 13; '707, claim 30; '867, claim 17)**	"[reconstruct / reconstructing] compressed data"
"null data compression type descriptor" **('867, claims 16, 17)**	"any recognizable descriptor that indicates no compression has been applied to the input data block"

After reviewing the parties' agreed constructions in light of the asserted claims, specification, and prosecution history, the Court finds the parties' agreed constructions appropriate and construes the terms as set forth above.

CONCLUSION

For the foregoing reasons, the Court adopts the constructions set forth above.

So ORDERED and SIGNED this 25th day of April, 2018.

JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE