

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

SMARTFLASH LLC, *et al.*,

Plaintiffs,

v.

APPLE INC., *et al.*,

Defendants.

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CASE NO. 6:13cv447-JRG-KNM

**JURY TRIAL DEMANDED**

SMARTFLASH LLC, *et al.*,

Plaintiffs,

v.

SAMSUNG ELECTRONICS CO., LTD.  
*et al.*,

Defendants.

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CASE NO. 6:13cv448-JRG-KNM

**JURY TRIAL DEMANDED**

**MEMORANDUM OPINION AND ORDER**

This Memorandum Opinion resolves an additional claim construction dispute in United States Patent Numbers: (1) 7,334,720; (2) 7,942,317; (3) 8,033,458; (4) 8,061,598; (5) 8,118,221; and (6) 8,336,772. For the reasons discussed below, the Court resolves the dispute as stated.

**BACKGROUND**

On November 14, 2014, Smartflash filed a Motion to Enforce Compliance with *O2 Micro*, or in the Alternative, to Resolve Manufactured Claim Construction Disputes that Defendants Intend to Argue to the Jury (6:13CV447, Doc. No 317; 6:13CV448, Doc. No. 363).<sup>1</sup> The Court heard argument on dispositive and *Daubert* Motions on December 2, 2014. At that hearing, the Court also

<sup>1</sup> The Court GRANTED that motion in the alternative by ordering supplemental claim construction briefing as noted below.

heard argument on Smartflash’s Motion and ordered the parties to submit supplemental claim construction briefing. Smartflash and Defendants Apple, Inc., Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Samsung Telecommunications America, LLC, HTC Corporation, HTC America, Inc., Exedea, Inc. (collectively “Defendants”) submitted additional briefing.

Smartflash alleges Defendants infringe the following patents: U.S. Patent No. 7,334,720 (the ’720 Patent); U.S. Patent No. 7,942,317 (the ’317 Patent); U.S. Patent No. 8,033,458 (the ’458 Patent); U.S. Patent No. 8,061,598 (the ’598 Patent); U.S. Patent No. 8,118,221 (the ’221 Patent); and U.S. Patent No. 8,336,772 (the ’772 Patent). All patents are titled “Data Storage and Access Systems.” The patents-in-suit all stem from a common specification and share a common written description and figures.

#### **APPLICABLE LAW**

“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. Ficoso 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. Elam 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 (“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) (internal 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.

## CLAIM CONSTRUCTION

“content data memory” / “data memory” / “parameter memory” / “use rule memory” / “use status data” / “use rules”	
Uniloc’s Proposed Construction	Defendant’s Proposed Construction
<p>No construction necessary</p> <p>These terms do not require “logically separate” memories</p>	<p>Each of (1) “content data memory,” and “data memory” is, at least logically separate from each of (2) “parameter memory” and “use rule memory”</p> <p>“use status data” requires, at least, logically separate storage from content data</p> <p>“use rules” require, at least logically separate storage from content data</p>

At the claim construction hearing and in the parties’ claim construction briefing, initially the dispute for these terms centered on whether the memory types had to be physically separate from each other. The Court determined that they did not have to be physically separate. Now, Defendants conten

separate and distinct memories. *Id.* (citing Defendants’ experts’ declarations). Defendants further contend that Smartflash’s construction ignores express claim language and impermissibly broadens the claim scope. *Id.* at 4. Moreover, Defendants argue that Smartflash’s attempt to support its position by citing *Cannon Rubber Ltd. v First Years, Inc.*, 163 Fed. Appx. 870, 877 (Fed. Cir. 2005) fails because the Federal Circuit distinguished between claims reciting functional language and claims reciting purely structure. According to Defendants, Federal Circuit precedent requires that where claims recite only structural components in separate claim elements, they must be distinct. *Id.* at 5–6 (citing *Gaus*, 363 F.3d 1284). Further, Defendants assert that the specification “indisputably discloses distinct memory structures.” *Id.* at 6–7. (citing the ’720 Patent cols. 17:40–42; 18:8–10; 18:18–20; Figure 9) (“ . . . data memory also stores an index of content data stored in Flash memory 214 and associated content use rules, as well as DRM and royalty data for maintaining an audit trail of use history for rights management . . . . content data memory 214 preferably comprises at least 100 MB of data storage, partitioned as data blocks of a size selected to match the stored content type.”).

Additionally, Defendants contend that the patentee made statements in the prosecution history that support their construction. *Id.* at 7. Defendants highlight statements by the patentee that explain how content data and “use status data” are separately stored when distinguishing over a prior art reference. Defendants assert such statements are binding even if not necessary to overcome prior art because the patentee made claim amendments to overcome a Patent Office rejection. *Id.* (citing *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1377 (Fed. Cir. 2008)). Further, Defendants assert that a PHOSITA would read the pre-amendment claim language to cover “use status data and use rules read from either recited memory,” but the post-amendment language “makes clear that use status data and use rules are read from only parameter memory, separate from data memory.” *Id.* at 8 (citing the Court’s Claim Construction Order, 6:13CV447,

Doc. No. 229 at 17). Defendants cite *Shire Dev., LLC v. Watson Pharms., Inc.*, 746 F.3d 1326, 1332 (Fed. Cir. 2014) (finding claims required separate and distinct matrices based on a prosecution history statement), for the proposition that, even where statements in prosecution history do not rise to an unmistakable disavowal, they still inform the claim construction. *Id.* at 9. Defendants contend that the Court should also interpret the patentee’s prosecution history statements about “use status data” and “use rules” to require a distinction between the different recited memories in the claims.

Moreover, Defendants assert that the same reasoning applies for “use status data” as the “memory” terms for the requirement that “use status data” is always stored separately from content data. *Id.* at 10. According to Defendants, the plain claim language and the prosecution history similarly support that “use status data” must be stored logically separate from content.

Smartflash responds that prosecution disclaimer does not apply because the Court could reasonably interpret the prosecution statements as relating to the lack of disclosure of “use rules” in the prior art, not storing “use status data” and content data separately. 6:13CV447, Doc. 365 at 4. Smartflash points to the Court’s Claim Construction Order stating, “[t]he applicant contrasted the invention with the electronic ticket information of [the prior art], which was validated by an electronic signature, not use rules.” *Id.* (quoting 6:13CV447, Doc. No. 229 at 18). Smartflash asserts that because this interpretation is reasonable, Defendants cannot show clear and unambiguous disavowal that would warrant anything less than the full claim scope. *Id.* at 4–5. Smartflash argues that *Shire* does not apply here because claim language in that case made it chemically and spatially impossible for the inner and outer matrices to be the same thing. *Id.* at 5 n.3. Smartflash continues that even if prosecution disclaimer applies, it should only apply to “two-memory claims like [C]laim 1 of the ’720 [P]atent.”<sup>2</sup> *Id.* at 6. Smartflash takes the position that

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<sup>2</sup> According to Smartflash, these include Claim 1 of the ’720 Patent and Claims 2, 7, and 15 of the ’598 Patent.

claims that do not explicitly recite content and use rules as stored in two different memories do not require separate storage. *Id.* at 7. Smartflash asserts that the prosecution statements referred only to those claims, and other claims should be unaffected. *Id.* 7–8.

Moreover, Smartflash contends that any degree of separation satisfies the alleged requirement. *Id.* at 8. According to Smartflash, Defendants’ own experts provided inconsistent theories of “logical separation” in their reports and depositions despite now submitting declarations that present a unified theory. *Id.* at 9. (citing several different reports and depositions from Defendants’ experts). Smartflash contends that Defendants’ failure to withdraw the conflicting theories indicates they plan to argue claim construction to the jury. *Id.* As an example, Smartflash argues that Defendants’ experts have no basis for their theory that two files are sufficiently separate inside a folder but not inside a ZIP file. *Id.* at 10. Smartflash maintains that this theory is a clear attempt to set up non-infringement arguments and explains how Apple’s applications contain “use status data” and “content data” in a data structure analogous to a ZIP file. *Id.* Instead, Smartflash asserts, separate data structures in the same file can also be “logically separate.” *Id.*

Smartflash does not address the plain language of Claim 1 of the ’720 Patent that distinctly recites content and parameter memories or similar language from other claims. Although the claim language does not require physically separate memories, separately listed claim elements require some distinction. *See, e.g., Becton, Dickinson*, 616 F.3d at 1254. Neither does Smartflash address Defendants’ other arguments regarding the support for separate memories in the specification. Similarly, the specification provides support for some degree of separateness among the memories, at least where recited distinctly in the claims. *See* ’720 Patent cols. 6:33–39; 18:1–23.

Smartflash focuses on one of the Court’s statements in the Claim Construction Order: “The applicant contrasted the invention with the electronic ticket information of [the prior art], which was validated by an electronic signature, not use rules.” 6:13CV447, Doc. No. 229 at 18. However,

immediately preceding that statement, the Court noted “the applicant relied on evaluating ‘separate use data’ according to use rules.” These separate use rules were in contrast to “‘ticket data that is either valid or not valid in and of itself’” with no degree of separateness. *Id.* (quoting 6:13CV447, Doc. No. 160, Ex. G, 2/6/2007 Amendment at 2 & 9–10). Therefore, even though the Court rejected Defendants’ proposal of physically separate memories, the Court did not preclude a requirement of logically separate memories.

Further, “[a]n applicant’s invocation of multiple grounds for distinguishing a prior art reference does not immunize each of them from being used to construe the claim language. Rather, as [the Federal Circuit has] made clear, an applicant’s argument that a prior art reference is distinguishable on a particular ground can serve as a disclaimer of claim scope even if the applicant distinguishes the reference on other grounds as well.” *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1374 (Fed. Cir. 2007). The patentee therefore, may be held to statements explaining how content data and use status data are separately stored when distinguishing over the prior art even if there were additional grounds for distinguishing the prior art. Additionally, clear disavowal is not required to simply inform claim construction. *See Shire*, 746 F.3d at 1332 (“Although the prosecution history statements do not rise to the level of unmistakable disavowal, they do inform the claim construction.”).

Thus, the patentee’s statements during prosecution support Defendants’ argument that some degree of separation is required where distinct memories are recited or the claims indicate that particularly types of data are separately stored.

On balance, where claims recite two distinct memories, such as “parameter memory” and “content memory,” or otherwise state that content data is stored separately from “use rules” or “use status data,” logically separate storage is necessary. Smartflash concedes that, if adopted, the

“logically separate” requirement would apply to Claim 1 of the ’720 Patent and Claims 2, 7, and 15 of the ’598 Patent. 6:14CV447, Doc. No. 365 at 5–6.

Claim 31 of the ’598 Patent recites that “use rules” and “use status data” are read from “parameter memory,” but, as Smartflash notes, the claim does not explicitly recite another distinct memory type for storing content. However, “parameter memory” is used throughout the claims and specification as storing “use rules” and “use status data” separately from content. Claim 31 of the ’598 Patent must be consistently interpreted in light of the specification and the context of the other claims that distinctly recite both “parameter memory” and “content data memory.” *See Phillips*, 415 F.3d at 1314 (“Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.”); *CardSoft v. Verifone, Inc.*, 769 F.3d 1114, 1117 (Fed. Cir. 2014). Therefore, logically separate storage is also required for “parameter memory” and content for Claim 31 of the ’598 Patent.

Claim 26 of the ’772 Patent, by contrast, recites only “non-volatile memory” (rather than distinguishing between non-volatile “parameter memory” and non-volatile “content memory”) and does not otherwise specify that content is necessarily stored separately from “use status data and use rules.” Therefore, there is no separate storage requirement for that claim. Similarly, for example, Claims 8, 10, and 11 of the ’458 Patent and Claim 32 of the ’772 Patent do not distinctly recite separate memories for “use status data” and “stored data.”

Arguments related to whether two files stored in a ZIP archive file are logically separate, as well as arguments related to memory cells, partitioned memory, and memory linking, relate to questions of fact for determining infringement rather than questions of law for claim construction. *See PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) (“[A]fter the court has defined the claim with whatever specificity and precision is warranted by the language of the

claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact.”).

Thus, for claims reciting both “data memory” and “parameter memory” or “use rule memory,”<sup>3</sup> **the “content data memory” or “data memory” must be logically separate from the “parameter memory” or “use rule memory.”** Likewise, the claims require “use status data” and “use rules” to be stored separately from content only where the claims explicitly recite such a requirement, such as by distinctly reciting different memories.

### CONCLUSION

The Court hereby **ADOPTS** the above claim construction for the patents-in-suit.

So ORDERED and SIGNED this 26th day of January, 2015.

  
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K. NICOLE MITCHELL  
UNITED STATES MAGISTRATE JUDGE

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<sup>3</sup> Of the claims that the parties have addressed, the claims that fall into this category are Claim 1 of the '720 Patent and Claims 2, 7, and 15 of the '598 Patent. See 6:14CV447, Doc. 360 at 2; *id.*, Doc. No. 365 at 6. Claim 31 of the '598 Patent requires similar treatment.