United States District Court,
E.D. Texas, Marshall Division.

CHARLES E. HILL & ASSOCIATES, INC,
Plaintiff.
v.
HANOVER DIRECT, INC., Smartbargains, Inc., Valuevision Media, Inc., 1-800 Contacts, Inc,
Defendants.

Civil Action No. 2:07-CV-234 (DF)

Nov. 21, 2008.

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AMENDED CLAIM CONSTRUCTION ORDER

DAVID FOLSOM**, District Judge.**

Before the Court are the Patent Local Rule 4-3 Joint Claim Construction and Prehearing Statement, each party's Claim Construction briefs, and the parties' Joint Claim Construction Chart pursuant to P.R. 4-5(d). Dkt. Nos. 164, 174, 183, 187, and 190, respectively. A tutorial was held on June 23, 2008 and a Claim-Construction Hearing was held on June 24, 2008. *See* Tutorial Hr'g Tr., Dkt. No. 197; Claim-Construction Hr'g Tr., Dkt. No. 198. The Court previously entered a claim-construction order in this matter (Dkt. No. 227), but now *sua sponte* enters this revised order to correct typographical errors in the previous order relating to a removed footnote. The original footnote 15 was removed from the order but the references to footnote 15 remained elsewhere in the order. That problem has been corrected in this order. To summarize the changes, the following footnotes are modified in this order: 21, 24, 26, 28, and 37. The order is otherwise unchanged; none of the Court's constructions have changed.

TABLE OF CONTENTS

I. BACKGROUND -6-
A. Existing Lawsuit -6-
B. Previous Actions -6-
II. LEGAL PRINCIPLES -7-
III. THE PATENTS-IN-SUIT -7-

A. U.S. Patent No. 5,528,490 -8-
B. U.S. Patent No. 5,761,649 -10-
C. U.S. Patent No. 6,029,142 -12-
IV. CONSTRUCTION OF AGREED TERMS -14-
V. CONSTRUCTION OF DISPUTED TERMS -15-
A. "Variable Data" and "Constant Data" -15-
(i) The Parties' Positions -16-
(ii) The Court's Construction -16-
B. "Graphics Data" -18-
(i) The Parties' Positions -18-
(ii) The Court's Construction -19-
C. "Textual Data" -22-
(i) The Parties' Positions -22-
(ii) The Court's Construction -22-
D. "Main Computer" and "Vendor's Main Computer" -24-
(i) The Parties' Positions -24-
(i) The Court's Construction -25-
E. "Remote Computer" and "Customer's Remote Computer" -26-
(i) The Parties' Positions -26-
6(ii) The Court's Construction -26-
F. C"Memory Of A Main Computer," "Memory Of The Main Computer," "Memory Of A Remote Computer," and "Memory Of The Remote Computer" -32-
(i) The Parties' Positions -32-
(ii) The Court's Construction -33-

G. "Updating" and "Transmitting" Limitations -35-

(i) The Parties' Positions -35-

(ii) The Court's Construction -37-

H. "Updating portions of the program stored in the memory of the remote computer that are different from the program stored and maintained in the memory of the main computer" -45-

(i) The Parties' Positions -45-

(ii) The Court's Construction -45-

I. "Product Information" -47-

(i) The Parties' Positions -47-

(ii) The Court's Construction -48-

J. "Updated Constant Data" and "Updated Graphics Data". -49-

(i) The Parties' Positions -49-

(ii) The Court's Construction -50-

K. "Transmitting"-52-

(i) The Parties' Positions -52-

(ii) The Court's Construction -53-

L. "Integrating," "Generating" and "Displaying" -55-

(i) The Parties' Positions -56-

(ii) The Court's Construction -57-

M. "Selecting At Least One Product At The Remote Computer" -61-

(i) The Parties' Positions -61-

(ii) The Court's Construction -61-

N. "Map" -63-

(i) The Parties' Positions

(i) The Parties' Positions -63-
(ii) The Court's Construction -63-
O. "Identifying" -66-
(i) The Parties' Positions -66-
(ii) The Court's Construction -66-
P. Order of Limitations in Claim 1 of the '490 Patent -67-
(i) The Parties' Positions -69-
(ii) The Court's Construction -69-
Q. Order of Limitations in Claim 12 of the '490 Patent -74-
(i) The Parties' Positions -75-
(ii) The Court's Construction -75-
R. Order of Limitations in Claim 2 of the '649 Patent -77-
(i) The Parties' Positions -78-
(ii) The Court's Construction -78-
S. Order of Limitations in Claim 1 of the '142 Patent -79-
(i) The Parties' Positions -80-
(ii) The Court's Construction -81-
T. Order of Limitations in Claim 17 of the '142 Patent -84-
(i) The Parties' Positions -85-
(ii) The Court's Construction -85-
VI. CONCLUSION -87-

I. BACKGROUND

A. Existing Lawsuit

On June 6, 2007, Charles E. Hill & Associates, Inc. ("Plaintiff") filed an action against Abercrombie & Fitch Co., Alibris, Inc., Alloy, Inc., Delia's Inc., Hanover Direct, Inc., Harry & David Holdings, Inc., Northern Tool & Equipment Company, Inc ., Saks Incorporated, SmartBargains, Inc., ValueVision Media, Inc., West Marine, Inc., and 1-800 Contacts, Inc. in the Marshall Division of the Eastern District of Texas. Dkt. No. 1. Plaintiff alleged infringement of the U.S. Patent Nos. 5,528,490 (the "'490 Patent"), 5,761,649 (the "'649 Patent"), and 6,029,142 (the "'142 Patent"), collectively "the Hill Patents." Id. para.para. 18-33.

Many of the defendants have been dismissed from this case, with Hanover Direct, Inc., SmartBargains, Inc., ValueVision Media, Inc., 1-800 Contacts, Inc., and Intervenor-Defendant Microsoft Corp. (collectively "Defendants") remaining. Dkt. No. 174 at 7. FN1 The Plaintiff filed an Amended Complaint on August 31, 2007. Dkt. No. 27. On April 14, 2008, Microsoft filed an Amended Complaint in Intervention arising out of Plaintiff's enforcement of the Hill Patents against Microsoft customers, Hanover Direct, Inc., SmartBargains, Inc., ValueVision Media, Inc., and 1-800 Contacts, Inc. Dkt. No. 162 para. 6.

A. Previous Actions

These patents have been described and construed in various courts. *See* Dkt. No. 174 at 8; Dkt. No. 183 at 10 n. 1; Charles E. Hill & Assocs., Inc. v. CompuServe, Inc. ("CompuServe I "), 65 F.Supp.2d 924 (S.D.Ind.1999) (McKinney, J.) (claim construction order); Charles E. Hill & Assocs., Inc. v. CompuServe, Inc. ("CompuServe II "), 33 Fed. App'x. 527 (Fed.Cir.2002); *Charles E. Hill & Assocs., Inc. v. CompuServe Inc.* ("CompuServe II"), IP 97-0424-C-M/S, 2003 U.S. Dist. LEXIS 19218 (S.D.Ind. Aug. 29, 2003) (second claim construction order); *Charles E. Hill & Assocs., Inc. v. CompuServe, Inc.,* IP 97-0424-C-M/S, 2003 U.S. Dist. LEXIS 18187 (S.D.Ind. Sept. 26, 2003); Charles E. Hill & Assocs., Inc. v. Amazon.com, Inc., No. 2:02-cv-186, 2005 WL 2483510 (E.D.Tex. Oct.7, 2005).

II. LEGAL PRINCIPLES

A determination of patent infringement involves two steps. First, the patent claims are construed, and, second, the claims are compared to the allegedly infringing device. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1455 (Fed.Cir.1998) (en banc). The legal principles of claim construction were reexamined by the Federal Circuit in Phillips v. AWH Corp., 415 F.3d 1303 (Fed.Cir.2005) (en banc). The Federal Circuit in *Phillips* expressly reaffirmed the principles of claim construction as set forth in Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576 (Fed.Cir.1996), and Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111 (Fed.Cir.2004). Thus, the law of claim construction remains intact. Claim construction is a legal question for the courts. Markman, 52 F.3d at 979.

The Court, in accordance with the doctrines of claim construction which it has outlined in the past, construes the claims of the Hill Patents below. *See Pioneer v. Samsung,* No. 2:07-cv-170, Dkt. No. 94 at 2-8 (E.D. Tex. filed Mar. 10, 2008) (claim construction order).

III. THE PATENTS-IN-SUIT

Pursuant to the Court's docket control order (Dkt. No. 118), Plaintiff limited the number of asserted claims to ten claims. The selected claims are claim 9 of the '490 Patent against all Defendants and claim 12 of the ' 490 Patent against Microsoft only, claims 2, 3, and 18 of the '649 Patent against all Defendants, and claims 1, 6, 11, 17, and 20 of the '142 Patent against all Defendants. Dkt. No. 153 at 2. The Plaintiff explained:

The Hill Patents are related to each other as continuations; as such, the Hill Patents are identical, except for their claims. For that reason, a citation to any part of the '490 Patent, other than the claims, can and should be considered a citation to any of the Hill Patents.

Plaintiff's Opening Brief, Dkt. No. 174 at 10 n.5.

The technology generally covers an electronic catalog system and method which can provide up-to-date information by handling communication between a vendor's (main) computer and a customer's (remote) computer. CompuServe I, 65 F.Supp.2d at 931. To save time in downloading data, such as graphics data, the two computers "cooperate" so that catalog data is stored on both computers with "constant" and "variable" data stored on the main computer and constant data stored on the remote computer. *Id*. When a customer seeks information about a product in the catalog, the software checks the revision status and automatically updates the customer's computer. When the vendor's main computer transmits the data to the remote computer, it is accompanied by a map to merge the variable data with the constant data. *Id*. at 932.

A. U.S. Patent No. 5,528,490

The '490 Patent, entitled "Electronic catalog system and method," issued on June 18, 1996. The Abstract reads:

An electronic catalog system and apparatus is provided for producing information related to a selected product on a remote computer. The system and method performs the steps of storing and maintaining variable data and constant data related to a plurality of products in a memory of a main computer and storing constant data related to a plurality of products in a memory of a remote computer. A product is then selected from the remote computer memory for which product information is desired. A constant data revision status in the memory of the main computer is then compared with a constant data revision status in the memory of the remote computer, and constant data in the memory of the remote computer is updated with constant data stored in the memory of the main computer, if necessary. Variable data related to the selected product is then transmitted from the main computer to the remote computer and integrated with constant data stored in the memory of the remote computer associated with the selected product to provide product information related to the selected product including both constant and variable data. The electronic catalog system can detect pirated copies of the data or program stored in the remote computer and prevent the original copy and all pirated copies from accessing data in the main computer.

The asserted claims read:

1. A method for generating information related to a product, the method comprising the steps of:

storing and maintaining variable data and constant data related to at least one product and a main revision status in a memory of a main computer, the main revision status indicating the revision level of the constant data stored in the main computer;

storing constant data related to the at least one product and a remote revision status in a memory of a remote computer, the constant data being a subset of information data related to the at least one product, the remote revision status indicating the revision level of the constant data stored in the remote computer;

transmitting the remote revision status from the remote computer to the main computer;

comparing the remote revision status with the main revision status;

updating constant data stored in the memory of the remote computer with constant data maintained in the memory of the main computer that is different from the constant data stored in the memory of the remote computer;

transmitting variable data related to the at least one product from the main computer to the remote computer; and

integrating constant data related to the at least one product with the variable data related to the at least one product in the remote computer to generate the information data related to the at least one product including both constant data and variable data.

9. The method of claim 1, further comprising the step of transmitting a map from the main computer to the remote computer along with the variable data to permit the remote computer to perform the integrating step.

12. The method of claim 1, further comprising the steps of:

storing a program and a remote program revision status in the memory of the remote computer, the remote program revision status indicating the revision level of the program stored in the memory of the remote computer;

maintaining the latest revisions of the program and a main program revision status in the memory of the main computer, the main program revision status indicating the revision level of the program stored in the memory of the main computer;

transmitting the remote program revision status from the remote computer to the main computer;

comparing the remote program revision status to the main program revision status; and

updating portions of the program stored in the memory of the remote computer that are different from the program stored and maintained in the memory of the main computer.

B. U.S. Patent No. 5,761,649

The '649 Patent, entitled "Method for Updating a Remote Computer," issued on June 2, 1998. The Abstract reads:

A method for accessing product information data includes storing product data including graphics data and textual data related to a plurality of products in a memory of a main computer, storing a first subset of product data including graphics data related to at least one product in a memory of the remote computer, and transmitting a data request query related to a selected product from the remote computer to the main computer. The method also includes identifying a second subset of product data related to the selected product stored in the memory of the main computer based on the data request query; transmitting textual data from second subset of product data from the main computer to the remote computer, transmitting only

updated graphics data from the main computer to the remote computer, storing the updated graphics data in the memory of the remote computer, and combining the textual data received from the main computer with graphics data stored in the memory of the remote computer to provide complete product information data related to the selected product.

The asserted claims read:

1. A method for accessing product information data related to a selected product stored in a vendor's main computer from a customer's remote computer, the method comprising:

storing product data including graphics data and textual data related to a plurality of products in a memory of the main computer;

storing a first subset of product data including graphics data related to at least one of the plurality of products in a memory of the remote computer;

selecting at least one product at the remote computer;

transmitting a data request query related to the at least one selected product from the remote computer to the main computer;

identifying a second subset of product data including graphics data and textual data related to the selected product from the product data stored in the memory of the main computer based on the data request query;

transmitting the textual data from second subset of product data from the main computer to the remote computer;

transmitting only updated graphics data from the second subset of product data that is different from the graphics data in the first subset of product data from the main computer to the remote computer;

storing the updated graphics data in the memory of the remote computer; and

combining the textual data from the second subset of product data received from the main computer with graphics data related to the selected product stored in the memory of the remote computer to provide complete product information data related to the selected product including both graphics and textual data.

2. The method of claim 1, further comprising displaying the complete product information data at the remote computer.

3. The method of claim 1, further comprising transmitting a map from the main computer to the remote computer along with the second subset of product data to permit the remote computer to perform the combining step.

16. A method for accessing product information data related to a selected product stored in a vendor's main computer from a customer's remote computer, the method comprising:

storing product data including constant data and variable data related to a plurality of products in a memory

of the main computer;

storing a first subset of product data including constant data related to at least one of the plurality of products in a memory of the remote computer;

selecting at least one product at the remote computer;

transmitting a data request query related to the at least one selected product from the remote computer to the main computer;

identifying a second subset of product data including constant and variable data related to the selected product from the product data stored in the memory of the main computer based on the data request query;

transmitting variable data from second subset of product data from the main computer to the remote computer;

transmitting only updated constant data from the second subset of product data that is different from the constant data in the first subset of product data from the main computer to the remote computer;

storing the updated constant data in the memory of the remote computer; and

combining the variable data received from the main computer with constant data related to the selected product stored in the memory of the remote computer to provide complete product information related to the selected product.

18. The method of claim 16, further comprising transmitting a map from the main computer to the remote computer along with the second subset of product data related to the selected product to permit the remote computer to perform the combining step.

C. U.S. Patent No. 6,029,142

The '142 Patent, entitled "Electronic catalog system and method," issued on Feb. 22, 2000. The Abstract reads:

An apparatus and method are provided for displaying product information data related to at least one product. The method includes the steps of transmitting a data request from the remote computer to the main computer, transmitting the variable data and display information from the main computer to tie remote computer, transmitting updated constant data from the main computer to the remote computer, and storing the updated constant data in the memory of the remote computer. The method also includes the steps of integrating constant data stored in the memory of the remote computer with the variable data received from the main computer using the display information received from the main computer to format the constant data and the variable data to generate the product information data related to the at least one product, and displaying the product information data generated by the remote computer during the integrating step on a monitor coupled to the remote computer.

The asserted claims read as follows:

1. A method for displaying product information data related to at least one product on a monitor coupled to a remote computer using variable data and constant data related to the at least one product stored and maintained in a memory of a main computer and using constant data related to the at least one product stored in a memory of the remote computer, the constant data being a subset of the product information data related to the at least one product, the method comprising:

transmitting a data request from the remote computer to the main computer;

transmitting the variable data and display information from the main computer to the remote computer, the display information indicating a format of the variable data and a display location of the constant data relative to the variable data;

transmitting updated constant data from the main computer to the remote computer if the constant data stored in the memory of the remote computer is different from the constant data stored in the memory of the main computer;

storing the updated constant data in the memory of the remote computer;

integrating constant data stored in the memory of the remote computer with the variable data received from the main computer using the display information received from the main computer to format the constant data and the variable data to generate the product information data related to the at least one product; and

displaying the product information data generated by the remote computer during the integrating step on the monitor coupled to the remote computer.

6. The method of claim 1, wherein the display information includes scale information to indicate a display size for the constant data.

11. The method of claim 1, wherein the display information provides an instruction for positioning the constant data on the monitor.

17. The method of claim 1, further comprising storing and maintaining a main revision status in the memory of the main computer, the main revision status indicating the last time the constant data stored in the main computer was revised, and storing a remote revision status in the memory of the remote computer, the remote revision status indicating the last time the constant data stored in the remote computer was revised.

20. The method of claim 1, wherein the display information is transmitted along with the variable data each time variable data is transmitted from the main computer to the remote computer.

IV. CONSTRUCTION OF AGREED TERMS

The parties have reached agreement as to the construction of several previously-disputed terms. These constructions were set forth in the initial P.R. 4-3 Joint Claim Construction and Prehearing Statement:

Claim Term / Phrase / Clause	**Agreed Definition**
Patent No.: Claim No(s).	
storing/stored	"recorded in a storage device so that data can be

	obtained as necessary to perform the steps of the claimed method"
'490: 1 '649: 1, 16	
'142: 1, 17	
maintaining/maintained '490: 1, 12	"keeping the most current information available"
'142: 1, 17	
program	"a series of instructions that will cause a computer to process data"
'490: 12	
data request query	"a request for information from a database"
'649: 1, 16	
data request	"a request for information from a database"
'649: 1, 16	
Product '490: 1 '649: 1, 2, 3, 16, 18	"tangible good"
'142: 1	
Revision Status '490: 1, 12	"an indication of the revision level of the relevant data"
'132: 17	
Revision Level	"a designation which indicates the version of the data or program which has been changed"
'490: 1, 12	
transmitting a data request query related to the at least one selected product from the remote computer to the main computer '649: 1, 16 transmitting a data request from the remote computer to the main computer	There is no need to construe this clause. Construing this clause beyond defining the constituent terms discussed elsewhere will not assist the jury's understanding of the clause.
'142: 1	
transmitting the variable data and display information from the main computer to the remote computer, the display information indicating a format of the variable data and a display location of the constant data relative to the variable data	There is no need to construe this clause. Construing this clause beyond defining the constituent terms discussed elsewhere will not assist the jury's understanding of the clause.
'142: 1	
an instruction for positioning the constant data on the monitor	There is no need to construe this clause. Construing this clause beyond defining the constituent terms discussed elsewhere will not assist the jury's understanding of the clause. Furthermore, the clause

	should not be interpreted under 35 U.S.C. s. 112, para. 6.
'142: 11	
maintaining variable data and constant data related to at least one product ... in a memory of the main computer	"keeping the most current variable data and constant data available ... in a memory of the main computer"
'490: 1	

Dkt. No. 190, Exh. 1 at 11-14.

In view of the parties' agreements on the proper constructions of each of the identified terms, the Court adopts the parties' Agreed Constructions. The agreed constructions shall govern this case.

V. CONSTRUCTION OF DISPUTED TERMS

A. "Variable Data" and "Constant Data"

The term "variable data" occurs in asserted claims 1 and 9 of the '490 Patent, claim 16 of the '649 Patent, and claims 1 and 20 of the '142 Patent. The term "constant data" occurs in asserted claim 1 of the '490 Patent, claim 16 of the '649 Patent, and claims 1 and 17 of the '142 Patent.

(i) The Parties' Positions

Hill submits that variable data should mean "product information classified as capable of changing at any time" and that "constant data" should mean "product information classified as likely to change less often than variable data." P.R. 4-5(d) Joint Claim Construction Chart, (hereinafter "JCCC"), Dkt. No. 190-2 at 3. Defendants propose that "variable data" means "product information classified by the vendor as capable of changing at any time," and that "constant data" means "product information classified by the vendor as likely to change less often than variable data." *Id*.

The competing proposals for these terms reveal that the parties' primary disagreement relates to whether the terms require that the "vendor" classify data as "variable" or "constant."

(ii) The Court's Construction

The Court first notes Hill's proposal for each of these disputed terms is identical to the definition provided by Judge McKinney in *CompuServe I,* 65 F.Supp. at 947. Furthermore, as argued by Hill, "[d]uring the course of the *CompuServe* Case, the Federal Circuit accepted and used both of these definitions." Dkt. No. 174 at 17-18; *See also* Hill & Assocs., 33 Fed. App'x. at 534 ("Accordingly, we agree with the district court that Hill failed to demonstrate a triable fact issue on the "constant-variable" limitation of the method claims of the '490 Patent.").

While Defendants generally agree "that the *CompuServe* court's constructions of 'variable data' and 'constant data' are substantially correct ... Defendants propose to clarify the prior constructions by making explicit the classification of product data into 'variable data' and 'constant data' must be 'by the vendor .' " Dkt. No. 183 at 25. In particular, "Defendants seek to avoid an argument down the road from Hill that the recited classification of data as "variable" or "constant" can be made after the fact, for example by an expert that Hill calls at trial." *Id*. at 25-26. Defendants further argue that both Judge McKinney and the Federal Circuit"

accepted that the "variable data" and "constant data" classifications needed to be made by the vendor." *Id*. at 26.

The Court disagrees with Defendants because the patents do not demand that a "vendor" classify data as "constant" or "variable ." Further, this Court is not persuaded that either Judge McKinney or the Federal Circuit indicated otherwise. Judge McKinney addressed the same issue in *CompuServe I,* finding that the parties in that matter disagreed "about whether the definitions for constant and variable data must include a statement regarding who classifies product information into the two subsets of data." *CompuServe I,* 65 F.Supp. at 945. This Court agrees with Judge McKinney that "the patent does not include any step that describes classifying data. Instead, the invention assumes data is already classified and then describes the operations performed on or with that data." *Id*. This issue was revisited in a later *CompuServe* opinion where Judge McKinney confirmed that there "is no limitation as to who will do the classifying of the data." *Charles Hill & Assoc., Inc. v. CompuServe, Inc.,* No. IP97-0424-C-M/S 2000 U.S. Dist. LEXIS 14200, at (S.D.Ind. Aug. 24, 2000). In addition, the Court finds no contrary indication in the Federal Circuit opinion. *See* CompuServe II, 33 Fed. App'x. at 527.

The Court agrees with Defendants that variable or constant data may not be classified "after the fact, for example by an expert...." Dkt. No. 183 at 25. Judge McKinney apparently believed the same when he stated that "the invention assumes data is ***already*** classified and then describes the operations performed on or with that data." *CompuServe I,* 65 F.Supp. at 945 (emphasis added). The Federal Circuit also agreed when it found infringement to be contingent on the accused system reacting to the data's classification, which would be impossible if the data were not classified until later. In this regard, the Federal Circuit stated:

The district court correctly ruled that the accused CompuServe system would infringe the method claims of the '490 patent only if the CompuServe system performed the claimed steps with respect to data based on the relative likelihood that the data would be changed. That is the necessary consequence of the district court's construction of the term "constant data" as "product information classified as likely to change less often than variable data," a construction with which Hill does not take issue. Thus, as the district court correctly pointed out, it was not enough for Hill to show that some product data files had headers with particular last modified dates and others had headers designated "Last Modified: Unknown." Of course, a page designer might choose to assign the different headers to files based on the frequency with which the data in those files is likely to change. But Hill was required to produce evidence that the CompuServe system distinguished between constant and variable data on that basis.

CompuServe II, 33 Fed. App'x. at 533.

While the Court concludes that "variable data" and "constant data" may not be classified after-the-fact, the Court finds that Judge McKinney's definition adequately conveys that concept. Having resolved any potential dispute between the parties on this issue FN2, the Court adopts Judge McKinney's definition. The Court construes the term "**variable data" to mean "product information classified as capable of changing at any time" and "constant data" to mean "product information classified as likely to change less often than variable data.**"

B. "Graphics Data"

This term occurs in asserted claim 1 of the '649 Patent.

(i) The Parties' Positions

Hill proposes that "graphics data" means "data related to computer-generated pictures produced on a screen." JCCC at 3. Defendants propose the definition, "data representing pictures displayed on a computer screen." Id. The crux of the parties disagreement is seemingly whether "graphics data" must "represent" pictures or whether it must merely be "related" to pictures.

(ii) The Court's Construction

In the *Charles E. Hill v. Amazon. com* case, Judge Ward defined this identical term as "data related to computer-generated pictures produced on a screen. Graphics range from simple line or bar graphs to colorful and detailed images." Amazon, 2005 WL 2483510, at *4. Hill argues that its proposal is based on Judge Ward's definition, which is well supported by the patent specification. Dkt. No. 174 at 18 ("Judge Ward defined *graphics data* as 'data related to computer-generated pictures produced on a screen.' ... This definition is supported by the specification...."). Hill additionally quotes excerpts from the specification to support Judge Ward's construction:

The Summary of the Invention: "For instance, the customer's computer may include *high resolution graphics data illustrating the various catalog items in detail*."

"Examples of constant data used for generation of data sheets include logos, *graphics data for outlines and boxes,* format data which labels the units of the product specifications (i.e.Hertz, Volts, RPM, etc), and graphics data illustrating the configuration of various products."

"[C]ustomer's computer 18 provides *graphical information* to the customer as illustrated at block 266. Illustratively, customer's computer displays *drawings of an electric motor* ...."

Id. at 18-19 (quoting '490 Patent at 1:59-61, 9:41-45, 16:7-10) (emphasis added) (internal citations omitted).

Defendants argue that Judge Ward's definition ("data ***related to*** computer generated pictures ...") is vague because "[t]he phrase 'related to' is an open-ended term that blurs the dividing line between 'graphics data' and 'textual data'...." Dkt. No. 183 at 27 (emphasis added). To explain this position, Defendants ask the Court to "[c]onsider, for example, a textual price term displayed next to a picture of an item for sale on a computer screen. The price term is certainly 'related to' the picture of the item, and therefore, under Hill's construction may fall within the scope of 'graphics data'; yet it could also fall within the definition of 'textual data,' which is how it would more naturally be classified." *Id*. at 27-28.

Hill argues that Defendant's proposal is based solely on an embodiment. Dkt. No. 174 at 19 ("[t]he Defendants' definition of graphics data ... appears to be a recitation of one embodiment disclosed in the Hill Patents, i.e., 'graphics data illustrating the configuration of various products.' " Hill further argues that Defendant's definition would exclude an embodiment of "graphics data for outlines and boxes," because "outlines and boxes are data related to computer-generated pictures but may not be included as 'data representing pictures.' " *Id*. Notably, however, Hill's arguments stop short of suggesting that the term "graphics data" may encompass text or anything else that is not presented to the user as some type of image or illustration.

The Court agrees with Defendants that the use of the word "related" in Judge Ward's definition may allow a misunderstanding regarding whether text or items are considered "graphics data." The Court finds that such

a misunderstanding would be an improper use of the term "graphics data." The patent indicates that "graphics data" and "textual data" are different. '490 Patent at 2:57-58 ("Constant data includes both graphics data and textual data."). Furthermore, both the plain meaning of "graphics" and every relevant example in the specification indicates that "graphics data" is a picture, illustration or some type of image as compared to text: "graphics data ***illustrating*** various catalog items," FN3 "graphics data by phone lines 22 is very slow, especially if ***high resolution*** is desired," FN4 technical data sheets with ***high resolution*** graphics," FN5 "graphics data for ***outlines and boxes,***" FN6 "graphics data ***illustrating*** the configuration of various products," FN7 and, "Dimensional Data is ***downloaded as text data, but must be processed to create a graphics file*** in order to display the ***borders around the text.***" FN8 Thus, both the plain meaning of the term "graphics data" and its usage throughout the subject patents confine "graphics data" to a picture, illustration or some type of image.

Finally, in reviewing Judge Ward's construction of "graphics data," the Court finds no basis to conclude that he intended for "graphics data" to include text or any other data that does not "represent" some type of image or illustration.FN9 Thus, in order to resolve the parties disputes, the Court adopts Judge Ward's definition with the clarification as follows: "**graphics data" means "data representing computer-generated pictures produced on a screen. Graphics range from simple lines, bars or graphs to colorful and detailed images.**"

C. "Textual Data"

This term occurs in asserted claim 1 of the '649 Patent.

(i) The Parties' Positions

Hill proposes that "textual data" means "data related to computer-generated words, letters, or numbers produced on a screen." JCCC at 3. Defendants propose the definition, "data representing words, letters, or numbers displayed on a computer screen" Id. Similar to the last term, the crux of the parties disagreement is whether "textual data" must "represent" text or whether it merely must be "related" to text.

(ii) The Court's Construction

Judge Ward also defined this term in the previous case. Here, Judge Ward provided the following definition: "data related to computer-generated words, letters, or numbers produced on a screen." Amazon, 2005 WL 2483510, at *4. As with the prior term, Hill argues that its proposal is based upon Judge Ward's definition, which is well supported by the specification. Dkt. No. 174 at 20 ("Judge Ward's construction of *textual data* is supported by consistent usage in the specification."). Hill further argues that Defendants' proposal-"textual data" must represent text-is too narrow because it conflicts with the following passage from the specification: "[t]he definition file is an ASCII text file in which each line of text refers to one specific display file, and the manner in which it is to be displayed." *Id* . (citing ' 490 Patent at 20:46-48). Once again, Hill stops short of arguing that "textual data" may comprise graphics items.

The Court disagrees with Hill regarding the impact of the specification. Hill's quotation above does not convey the meaning of "textual data." Rather, the quoted passage and the surrounding portion of the specification attempt to describe the anatomy of a "definition file" called a "map file," and further define how the map file is used to aid in the process of displaying data:

The actual display of the data involves the use of a definition file (<File>. DEF). This file is the "map" that

provides the instructions required to integrate all of the data on customer's computer 18. The definition file is an ASCII text file in which each line of text refers to one specific display file, and the manner in which it is to be displayed.

'490 Patent at 20:42-48. The only reference to "text" in Hill's citation simply describes the embodiment of a "map file" as an ASCII text file, which is simply a file comprised of ASCII characters.FN10

In assessing ordinary meaning, the Court concludes that "textual data" refers to text such as the characters that may be seen on a keyboard or on this page. Furthermore, "textual data" does not refer to items other than text such as graphics. This conclusion is fully consistent with the specification, including Hill's quoted sentence (an ASCII text file merely being a file of text). In addition, the specification teaches that "textual data" may comprise dimensional layout information, of course, in text form:

Constant data includes both graphics data and textual data. For instance, the customer's computer may include ***high resolution graphics data illustrating the various catalog items*** in detail. The customer's computer ***also*** includes ***constant textual data such as a dimensional data layout.*** Dimensions of the products and cost information are typically considered variable data stored on vendor's computer.

'490 Patent, 2:57-65 (emphasis added).

The specification further teaches that textual data downloaded as variable data is merged with "graphics" to create a complete data sheet:

When the customer requests information from the vendor that includes graphics data, the variable data is obtained by dialing vendor's computer 12 and downloading the required data. This data is then merged with locally resident graphics data previously stored on customer's computer 18 to ***generate a complete data sheet which includes both graphics and textual data*** .... Therefore, the present invention makes it practical for a vendor to offer technical data sheets with high resolution graphics to its customer on a real time basis.

'490 Patent at 9:25-36 (emphasis added).

As with the previous term, Judge Ward's order bears no suggestion contrary to this Court's resolution of the parties dispute regarding "related" versus "represented." FN11 Thus, the Court construes the term "**Xtextual data" to mean "data representing computer-generated words, letters, numbers or other characters produced on a screen.**"

D. "Main Computer" and "Vendor's Main Computer"

The terms "main computer" or "vendor's main computer" occur in asserted claims 1, 9 & 12 of the '490 Patent, claims 1, 3, 16 & 18 of the '649 Patent, and claims 1, 17 & 20 of the '142 Patent.

(i) The Parties' Positions

Hill proposes that both "main computer" and "vendor's main computer" mean "the vendor's computing device." JCCC at 1. Also for both terms, Defendants propose the definition, "a computing device that is owned by or in the possession of the vendor." Id. Here, the parties disagree regarding whether the terms require the computer to be "owned" or "possessed" by the vendor.

(ii) The Court's Construction

As with previous terms, Judge Ward provided a definition for these identical terms: "the vendor's computing device." Amazon, 2005 WL 2483510, at *9. FN12 Both parties purport to agree with Judge Ward's construction; however, the parties dispute the construction's meaning. In particular, Defendants argue that "[t]he use of the possessive form of 'vendor' in the phrase 'vendor's computing device 'denotes ownership or possession by the vendor." Dkt. No. 183 at 16. Defendants bolster this suggestion by noting that Figure 1 of the specification shows "the catalog system 10 of the present invention," which in turn "includes a vendor's computer located ***at the vendor's place of business.***" *Id*. (citing '490 Patent at 8:1-9).

Hill counters Defendants' argument stating that "the specification of the Hill Patents is *silent* on who owns or possesses the *main computer*." Dkt. No. 187 at 15. Hill elaborates, stating that the possessive word "vendor's" does not necessarily connote ownership or possession but rather "a computing device used by and/or on behalf of the vendor." This Court agrees with Hill and finds Defendants' arguments unpersuasive. The intrinsic record provides no basis to infer an ownership requirement with respect to the "main computer." Further, while use of the possessive apostrophe in the word "vendor's" may indicate possession or ownership, that punctuation equally applies to many other affiliations for the vendor, such as user status, beneficiary status, management status, financial underwriter status, etc. Defendants provide no basis for the Court to exclude other meanings of the apostrophe from the claim. Indeed, as Hill points out, the specification provides none.FN13

Accordingly, the Court construes the terms "**main computer" and "vendor's main computer" to mean "a computing device used by and/or on behalf of the vendor.**"

E. "Remote Computer" and "Customer's Remote Computer"

The terms "remote computer" or "customer's remote computer" occur in asserted claim 1 of the '490 Patent, claim 1 of the '649 Patent, and claim 1 of the '142 Patent.

(i) The Parties' Positions

Hill's primary position is that no construction is necessary, although Hill proposes the following on an alternative basis: "a computer used by a customer or other end user." JCCC at 1. Defendants propose the definition, "a computing device used by a customer, which contains dedicated electronic catalog software that permits the customer to browse general catalog data without connecting to the vendor's computer." Id.

(i) The Court's Construction

Defendants argue that the claimed "remote computer" "includes three components, each necessary to conform the patent claims with the disclosed invention: (1) the remote computer is used by a customer; (2) the remote computer contains dedicated electronic catalog software; and (3) the software on the remote computer permits the customer to browse general catalog data without connecting to the vendor's computer." Dkt. No. 183 at 17. Hill argues that " 'Defendants' definition ... improperly 'reads in' several limitations from the specification." Dkt. No. 174, at 24.

With respect to the portion of Defendants' proposal regarding use by a "customer," Defendants argue that the '649 Patent expressly claims "a customer's remote computer." Dkt. No. 183 at 17 (citing '649 Patent, claims 1 and 16). Defendants urge that for consistency reasons, the Court should apply the "customer"

limitation to the claims of the '490 and '142 Patents, even though the word "customer" does not appear in those claims. Id Finally, Defendants bolster their argument by citing several portions of the intrinsic record referring to customers:

Throughout the specification and the prosecution history, the patentee repeatedly refers to the user of the remote computer of the "invention" as a customer: " *[T]he present invention* relates to an improved electronic catalog system capable of providing a customer at a remote location with accurate product information from a vendor each time the customer uses the electronic catalog system." Col. 1, ll. 6-11 (emphasis added); *see also* col. 1, 1. 12-col. 3, 1. 8; Exh. B-1, Amendment and Reply Under 37 C.F.R. 61.111, Application No. 07/866,867, at 4 (filed Sept. 3, 1993) (repeatedly referring to "customer's" remote computer when describing the "present invention"). Further, in describing Figure 1A, which is a "diagram of the electronic catalog system 10 *of the present invention,*" the specification states that "[c]atalog system 10 also includes a computer 18 located at a remote customer's location." Col. 8, ll. 18-19 (emphasis added).

Id. at 17-18.

The Court agrees with Defendants regarding the application of the word "customer" in the '649 Patent where the word is expressly used. The Court otherwise disagrees because neither "consistency" nor the quoted portions from the intrinsic record provide an appropriate basis to import a limitation into the claims of the '490 and '142 Patents. In addition, while the parties do not raise this issue, the Court finds that the term "customer" may be ambiguous with respect to whether it refers strictly to a purchaser or more broadly to a shopper. Given that the patent is directed to "an electronic catalog system" and the context of the word "customer" as quoted above and as used throughout the specification, the Court finds that the word carries the broader connotation.

The Court now turns to Defendants' contention that the "remote computer" requires "dedicated electronic catalog software." Dkt. No. 183 at 18-19. Here, Defendants argue, without quotation, that the invention summary mandates dedicated catalog software. *Id*. at 18 (citing '490 Patent at 2:49-52). Next, Defendants propose that, in order "[t]o achieve the objects of the invention, software on the customer's computer is necessary," specifically dedicated electronic catalog software. *Id*. at 19. Finally, Defendants walk through various embodiments of the patent to conclude that "the purported invention of Hill's Patents must include software on the remote computer to permit off-line catalog browsing." *Id*. at 20.FN14 The Court disagrees with Defendant's assertion that a "remote computer," as claimed, necessarily requires dedicated catalog software. Even if one or more embodiments of the invention comprise or require catalog software, the claims, not the embodiments, define the invention. Phillips, 415 F.3d at 1312 ("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.' "). Furthermore, while the claims are clearly directed to catalog systems or functions, the specification supports a broader view of the claims than simply a dedicated software implementation. For example, the specification states that "[t]he electronic catalog system 10 of the present invention overcomes the speed disadvantage by creating a graphics catalog data base using both parametric design techniques and distributed data design techniques." '490 Patent at 9:20-24.

The Defendants further argue that the specification demonstrates the requirement of dedicated software:

The descriptions of the customer's computer in the "invention" further demonstrate that it requires dedicated electronic catalog software. Before any data is transmitted from the main computer, some data for all of the products is stored on the remote computer. *See* col. 1, ll. 56-58 ("The customer's computer contains *all*

constant data related to the catalog products.") (emphasis added). With the dedicated catalog software, the customer can browse through products, see some information about the products, and select a product to obtain more information-all without connecting to the main computer. *See* col. 2, ll. 5-7 ("In operation, the customer browses through general catalog data residing on the customer's computer and determines the exact catalog data required."); col. 2, ll. 49-52 ("Because all of the general catalog data is resident on the customer's computer, the normal browsing the user might do is accomplished locally at the customer's computer."). The remote computer software thus serves as a functional electronic catalog without involving the main computer.

After the customer selects a product for further information, the software connects to the vendor's computer, checks for updates to the data stored on the customer's computer, and makes specific requests for the additional product data that was not stored on the customer's computer. *See* col. 2, ll. 9-34. The patents emphasize that the process of connecting to the vendor's computer is entirely controlled by the software on the customer's computer and is therefore transparent to the customer. *See* col. 3, ll. 1-4 ("In the electronic catalog system of *the present invention,* the software controls when the customer's computer must log on to vendor's computer. In addition, the customer's computer automatically logs off vendor's computer after the required information is downloaded.") (emphasis added); col. 2, ll. 44-46 ("In the electronic catalog system of *the present invention,* the customer does not have the privilege of determining when to log on or when to log off the vendor's computer. The catalog system of *the present invention* automatically determines when it is necessary to log on to vendor's computer to retrieve additional data .") (emphasis added).

Dkt. No. 183 at 19-20.

After closely reviewing Defendants' arguments and citations, the Court is unpersuaded because the referenced portions of the specification do not relate to a requirement for *dedicated* software. Rather, the citations discuss data handling and other unrelated aspects of the disclosure.

Defendants' final position on this term is that the remote computer must support offline browsing. In this regard, Defendants first argue that the summary of invention mandates this requirement:

In the electronic catalog system of the present invention, the customer does not have the privilege of determining when to log on or when to log off the vendor's computer. The catalog system of the present invention automatically determines when it is necessary to log on to vendor's computer to retrieve additional data. *Because all of the general catalog data is resident on the customer's computer, the normal browsing the user might do is accomplished locally at the customer's computer*. The customer's computer automatically connects itself to vendor's computer and automatically requests the needed information *only after the desired product has been selected from data on the customer's computer*. The customer's computer automatically logs off vendor's computer after the requested data is received. Therefore, the electronic catalog system of the present invention typically reduces the on-line time by about 70-80%. Col. 2, ll. 44-59 (emphasis added); *see also* col. 2, ll. 3-12 ("In operation, the customer browses through general catalog data residing on the customer's computer and determines the exact catalog data required.... Once the desired catalog data has been selected, the electronic catalog system automatically calls the vendor's computer and logs on"). The scope of the claims must be accordingly limited.

Dkt. No. 183 at 22.

In addition, Defendants argue that "[d]uring the prosecution of the original Hill Patent, the applicant

distinguished the claimed invention from prior art catalog systems in which a customer connects to a vendor's computer and browses the data stored on the vendor's computer: 'The customer does not log on the main computer and browse the vendor's main computer memory to select product information.' " Dkt. No. 183 at 23 (citing Appeal Brief, Application No. 08/640,913, at 5 (filed Feb. 18, 1997)). Defendants urge this Court to require a limitation of off-line browsing in view of this statement and others like it.

"[A] statement made by the patentee during prosecution history of a patent in the same family as the patent-in-suit can operate as a disclaimer. To operate as a disclaimer, the statement in the prosecution history must be clear and unambiguous, and constitute a clear disavowal of scope." Verizon Services Corp. v. Vonage Holdings Corp., 503 F.3d 1295, 1306 (Fed.Cir.2007) (citations omitted). Defendants' argument cannot meet this high standard because the applicant's file history comment does not align with Defendants' request. The essence of applicant's file history statement is that the customer does not "log on" ***and*** *browse* "the main computer memory to select product information." This does not equate to a prohibition against browsing while online, at least because the remote computer may log on to the main computer but nevertheless browse from a local memory. *See* Lucent Tech, Inc. v. Gateway, Inc., 525 F.3d 1200, 1212 (Fed.Cir.2008) ("Because we find that the specification clearly supports a role for the host processor in control of object display, including the relative positioning of objects, we conclude that the district court erred in its construction of 'terminal device' to require that the device 'manage its associated display itself' and, more particularly, to exclude 'arrangements where the host processor controls the positioning of objects on the terminal display.' ").

Finally, the Court observes that the patents' use of the term "remote computer" is in the most ordinary sense in that it refers generally to a computer that is in a different physical location than the main computer. For example, the patents' background places a remote computer in a different location than a main computer: "The dial-up system includes *a remote computer at a customer location* with modem capabilities and a *main computer at the vendor's location*." '142 Patent at 1:19-21 (emphasis added). Furthermore, in defining the physical context of the invention, the detailed description also places the claimed computers in different locations: "[t]he catalog system 10 includes *a vendor's computer 12 located at the vendor's place ofbusiness* .... [and] also includes *a computer 18 located at a remote customer's location*." *Id*. at 8:5-12 (emphasis added). The essence of these quotes, as well as dozens of other uses of "remote computer" throughout the specification, is that the remote computer is "remote" in space from the main computer and at a different location.

Thus, having resolved the disputes between the parties, the Court construes the term "**remote computer" as "a computer that is located at a different physical location than the main computer.**" Furthermore, the Court construes the term "**customer's remote computer" to mean "a remote computer for use by a customer or prospective customer.**" FN15

F. "Memory Of A Main Computer," "Memory Of The Main Computer," "Memory Of A Remote Computer," and "Memory Of The Remote Computer"

These terms occur in asserted claims 1 and 12 of the '490 Patent, claims 1 and 16 of the '649 Patent, and claims 1 and 17 of the '142 Patent.

(i) The Parties' Positions

Hill's primary position is that no construction is necessary, although Hill proposes the following on a alternative basis: "a device or medium that can retain information for retrieval at the [main remote]

computer." JCCC at 1. Defendants propose the definition, "non-volatile memory." The parties disagree regarding whether the memory must be non-volatile.

(ii) The Court's Construction

Defendants argue that the claim references to memory should be confined to "non-volatile memory" because Hill's inventive purpose would be undermined by the use of volatile memory. Dkt. No. 183 at 24 (citing '490 Patent at 1:35-36, 56-59) ("If the data were 'stored' in volatile memory, however, it would be prone to automatic deletion whenever the electronic catalog program was used or the computer was restarted. The use of volatile memory would thus undermine the 'reduc[tion-in]-on-line time by about 70-80%' that was an 'object of the present invention.' ") Defendants further argue that Hill's expert report in *CompuServe* stated that the claims' "storing" limitation would not be met by the use of volatile memory, and Judge Ward "recognized" this admission. *Id*. at 24-25 ("In the *CompuServe* case, Hill's own expert on claim construction acknowledged that the 'memory' recited in the claims is not volatile memory. In defining the term 'storing'-a term on which the parties agree in this case-Judge Ward recognized this admission....")

The Court disagrees with Defendants because the intrinsic record bears no support to limit the ordinary meaning of the word "memory" to a single type of memory. In particular, the Court finds nothing in the intrinsic record that mandates a type of memory or clearly precludes another type. Furthermore, Defendants' use Hill's old expert report out of context. In the quoted portion, the expert was discussing infringement of the patent under the current Order of Judge McKinney, who defined "storing" as "recording in a storage device so that it will not be involuntarily removed or deleted." CompuServe I, 65 F.Supp.2d at 936. In view of that definition, Hill's expert reported:

What kind of system then would violate Judge McKinney's order? One example is placing information in volatile memory (RAM or cache: memory). This would not be "storing" because the information would be lost when the computer is turned off.

Dkt. No. 183, Exh. C.

Because Hill's expert was not discussing the meaning of storing and because Judge McKinney's definition of "storing" was reversed by the Federal Circuit, FN16 Hill's old expert report is not probative of the issues before this Court. Finally, apparently confronted with similar issues with respect to the term "storing," Judge Ward stated:

Although both sides support their construction with language from the Federal Circuit's opinion, the court is persuaded that the proper definition is " ***recorded in a storage device so that data can be obtained as necessary to perform the steps of the claimed method.***" This definition comports with the Federal Circuit's holding as well as that of Hill's own expert in the Indiana litigation, who drew a distinction between volatile and non-volatile memories. It also alleviates Hill's concerns, expressed in opposition to the defendants' proposed definition, with importing limitations from the preferred embodiment.

Amazon, 2005 WL 2483510, at *10 (emphasis added).

As evident from Judge Ward's remarks, he declined to define storing in a way that would preclude the use of volatile memory, even having Hill's expert report before him. This Court agrees with Judge Ward and thus declines to define these "memory" terms FN17 and cautions the parties to conform their trial arguments

accordingly.

G. "Updating" and "Transmitting" Limitations

The term "updating" appears in asserted claims 9 & 12 FN18 of the ' 490 Patent. The context of the other "updating" and "transmitting" limitations is given below.

(i) The Parties' Positions

The parties propose both competing claim terms and definitions for the patents' concept of "updating."

For the term "updating," Hill proposes Judge McKinney's definition: "an automatic process of adding, modifying, or deleting data records or program files to bring the remote computer up-to-date." JCCC at 3. Defendants do not submit a separate definition for the term "updating." Instead, Defendants submit the following terms. Id.

The term updating appears in asserted claims 9 and 12 of the '490 Patent (which depend from claim 1): "Updating constant data stored in the memory of the remote computer with constant data maintained in the memory of the main computer that is different from the constant data stored in the memory of the remote computer." In addition, the language in claims 1, 6, 11, 17 & 20 of the '142 Patent uses the term "updated": "Transmitting updated constant data from the main computer to the remote computer if the constant data stored in the memory of the remote computer is different from the constant data stored in the memory of the main computer." Hill's primary position for both terms is that no definition is necessary, but Hill submits an alternative proposal based upon Judge Ward's definition: "the updated constant data[, if it exists,] is transmitted from the main computer to the remote computer without the transmission of the constant data which has not been updated." JCCC at 4. Defendants propose an enumerated definition for both terms as follows: "1) '[t]he updated [constant/graphics] data is transmitted from the main computer to the remote computer without the transmission of the [constant/graphics] data which has not been updated '2) This step requires an actual transmission of updated [constant/graphics] data. It is not satisfied if the [constant/graphics] data has not been updated and is therefore not transmitted. 3) **['490 and**' 142 Patents **only]** This step requires transmitting all updated constant data related to all products for which there is updated constant data." Id.

Asserted claims 2 and 3 (which both depend from claim 1) of the '649 Patent include the following: "[t]ransmitting only updated graphics data from the second subset of product data that is different from the graphics data in the first subset of product data from the main computer to the remote computer." In addition, asserted claim 18 of the '649 Patent (which depends from claim 16) similarly includes, "[t]ransmitting only updated constant data from the second subset of product data that is different from the constant data in the first subset of product data from the main computer to the remote computer." As above, Hill's primary position for both terms is that no definition is necessary, but Hill submits the same alternative proposal: "the updated constant data[, if it exists,] is transmitted from the main computer to the remote computer without the transmission of the constant data which has not been updated." JCCC at 5. Defendants propose the same enumerated definition for both terms," 1) '[t]he updated [constant/graphics] data is transmitted from the main computer to the remote computer without the transmission of the [constant/graphics] data which has not been updated '2) This step requires an actual transmission of updated [constant/graphics] data. It is not satisfied if the [constant/graphics] data has not been updated and is therefore not transmitted." Id.

There are three primary disputes between the parties regarding these terms. The disputes are readily summarized by the three parts of Defendant's proposal.

(ii) The Court's Construction

The first disagreement between the parties relates to whether constant or graphics data sent from the main to the remote computer may include data that has not been "updated." Defendants argue that the claims of the '649 Patent expressly include this limitation and that Judge Ward applied the limitation to the other patents due to prosecution history disavowal. Dkt. No. 183 at 32 (The claim terms themselves make this requirement apparent for the '649 Patent-it recites "transmitting *only* updated [graphics/constant] data." '649 Patent, claims 1, 16 (emphasis added); *see also* Amazon, 2005 WL 2483510, at *5. And for the '490 and '142 Patents, as Judge Ward held, the prosecution history unequivocally disavows any broader claim scope for this step. *See* Amazon, 2005 WL 2483510, at *5.).

In full context, the '490 Patent applicants stated the following to the Patent and Trademark Office Examiner:

When the customer accesses the electronic catalog system of the present invention, customer's computer connects with the vendor's computer which includes all the latest revisions to the catalog. An initial check is made to determine whether the constant data stored on vendor's computer has been updated since the last time the customer contacted vendor's computer. If the constant data has been updated, ***vendor's computer transmits only the revised portions of the constant data to customer's computer.*** Vendor's computer then transmits the variable data related to the selected product to customer's computer.

Dkt. No. 183, Exh. B at 5-6 (emphasis added).FN19

Also considering the full context, the '142 Patent applicants stated the following to the Patent and Trademark Office Examiner:

Yaksich further does not disclose or suggest the step of "transmitting updated constant data from the remote computer if the constant data stored in the memory of the remote computer is different from the constant data sorted in the memory of the main computer" as claimed in claim 1. The Examiner admits that this step is not shown in Yaksich. Yaksich only discloses automatically transmitting an entire new business form to the remote computer. ***The present invention transmits only the updated or different portions of the constant data to the remote computer.*** For at least these reasons, Applicant submits that independent claim 1 patentably defines the invention over Yaksich. Accordingly, Applicant submits that claims 1-20 are in condition for allowance. Such action is respectfully requested.

Dkt. No. 183-4 at 58-59 (emphasis added).

Judge Ward considered this evidence in the Amazon case and commented:

Despite the claim language, during the prosecution of both the '490 Patent and the '142 Patent, the applicant emphasized that his invention was patentable over the prior art because the system transmitted "only" the updated constant data to the remote computer. To illustrate, the applicant urged, in the context of the '142 Patent, that the invention was distinguishable over the Yaksich reference because "[t]he present invention transmits only the updated or different portions of the constant data to the remote computer." '142 Patent, Response Paper 6, mailed June 1, 1999, at 4. As such, the patentee urged that the invention (including

limitations relating to updating constant data) involved systems or methods which transmitted only the updated constant data from the main computer to the remote computer. The court agrees with the defendants that the updating limitations should be construed in light of the statements in the prosecution history. The statements must, however, be read in context. What the patentee appears to have been arguing was that only updated constant data (as opposed to all of the constant data) would be transmitted to the remote computer. As such, the court construes these limitations to mean that "the updated constant data is transmitted from the main computer to the remote computer without the transmission of the constant data which has not been updated."

Amazon, 2005 WL 2483510, at *5.

After viewing the evidence, this Court agrees with Judge Ward regarding the application of disclaimer and construes the claims accordingly.

The second disagreement between the parties concerns whether the claims require "updated" data to be actually transmitted or whether contingent language in the claims relieves that requirement. Hill argues that "one of the benefits gained through the use of the Hill System is the ability to forego unnecessary transmission of the often large constant/graphics data while allowing current information to be had at the remote computer." Dkt. No. 164 at 32. Hill further argues that "the operation of the Hill System necessarily involves instances in which the *constant/graphics data* is sent and instances in which the *constant/graphics data* need not be sent." *Id*. In view of this argument, Hill opposes a claim construction that "requires an actual transmission of data," so the claims read "only on those instances in which the Hill System is unable to provide the efficiencies for which it was created." *Id*.

Defendants disagree with Hill, arguing that it is "apparent that the steps of the method are not performed if *no* updated data is transmitted." Dkt. No. 183 at 33. Defendants correctly note that "while a product may infringe an apparatus claim even though it is capable of non-infringing uses, a method claim is not practiced unless each and every step in the claim is performed." *Id*. at 34 (citing NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1318 (Fed.Cir.2005), and Zygo Corp. v. Wyko Corp., 79 F.3d 1563, 1570 (Fed.Cir.1996)). Defendants further argue that the actual claim terms do not provide conditional language that would obviate the transmission of updated data. *Id*. ("Defendants request a construction that the 'updating' steps are practiced only if updated (i.e.changed) data is transmitted.").

The Court finds that nothing in the intrinsic record or the arguments of the parties justifies creating or ignoring conditional language in the claims. Save one exception, the Court also agrees with the Defendants that the claims lack conditional language that obviates the transmission of updated data. For example, asserted claims 2 and 3 of the '649 Patent include the limitation "transmitting ***only*** updated graphics data from the second subset of product data that is different from the graphics data in the first subset of product data from the main computer to the remote computer." '649 Patent, claim 1 (emphasis added). Hill seemingly invites the Court to interpret the use of the word "only" to suggest that no "transmitting" is necessary if no "updated graphics data" exists. The Court declines this invitation because the claim's act of "transmitting" is not contingently stated. The word "only" merely qualifies what is sent, not whether transmission is to occur.

The Court further notes a more interesting example in claim 1 of the '142 Patent, which contains the following limitations:

transmitting updated constant data from the main computer to the remote computer if the constant data

stored in the memory of the remote computer is different from the constant data stored in the memory of the main computer;

storing the updated constant data in the memory of the remote computer.

'142 Patent, claim 1 (emphasis added).

In this claim, the word "if" in the transmitting step does modify the action of transmitting. Thus, the claim does not require actual transmission of updated constant data unless "the constant data stored in the memory of the remote computer is different from the constant data stored in the memory of the main computer." Id . However, the storing step is not conditional and requires "storing the updated constant data in the memory of the remote computer." Id. Defendants assert that "[o]bviously, one cannot store "updated constant data" if no updated constant data has been transmitted." Dkt. No. 183 at 34-35. While the Court agrees with Defendants that the storing step must be performed, the question of whether "updated constant data" is stored relates to infringement, which is not before the Court at this time. Thus, the Court finds that the transmitting step is contingently claimed although the storing step is not.

With respect to all the contested alternative limitations, the Court concludes that any conditional nature of the claimed method steps must be expressly stated in the claim. The Court rules specifically on each of the disputed limitations below.

The third disagreement between the parties concerns whether the '142 and ' 490 Patents require an "update" to include "all updated constant data related to all products for which there is updated constant data." Defendants acknowledge that Judge Ward rejected the same argument, but distinguish it here because a "claim differentiation argument was never advanced in that case." Dkt. No. 183 at 35, n.4.

Defendants' claim differentiation argument is based upon the "corresponding claim element of the '649 Patent" which requires "updating of graphics data for only a 'subset of product data.' " Id. This Court disagrees with Defendants and agrees with Judge Ward that "[t]he language of the claims does not require" the "all" limitation. Amazon, 2005 WL 2483510, at *5. "In the most specific sense, 'claim differentiation' refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim." Wright Flow Control Corp. v. Velan, Inc., 438 F.3d 1374, 1380 (Fed.Cir.2006) (citing Nazomi Commc'ns, Inc. v. Arm Holdings, PLC., 403 F.3d 1364, 1370 (Fed.Cir.2005); Karlin Tech., Inc. v. Surgical Dynamics, Inc., 177 F.3d 968, 971-72 (Fed.Cir.1999); Phillips, 415 F.3d at 1314-15). "Thus, the claim differentiation tool works best in the relationship between independent and dependent claims." *Id*. (citing Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed.Cir.2004)). As noted above, Defendants' claim differentiation argument is based upon "corresponding" claims in related patents, so the "specific sense" of claim differentiation does not apply. However, in a broader sense, the Federal Circuit has generally characterized claim differentiation as the "presumption that each claim in a patent has a different scope." *Id*. (citing Versa Corp. v. Ag-Bag Int'l Ltd., 392 F.3d 1325, 1330 (Fed.Cir.2004); Comark Commc'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed.Cir.1998)). However, since different claims may also have the same meaning, the Federal Circuit has cautioned that "claim differentiation is a guide, not a rigid rule." *Id*. (citing Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533, 1538 (Fed.Cir.1991)).

With that background, the Court observes two considerations that generally govern claim differentiation when, as here, it is "applied to two independent claims: (1) claim differentiation takes on relevance in the context of a claim construction that would render additional, or different, language in another independent

claim superfluous; and (2) claim differentiation 'can not broaden claims beyond their correct scope.' " *Id.* (citing Fantasy Sports Props. v. Sportsline.com, 287 F.3d 1108, 1115-16 (Fed.Cir.2002)). Here, Defendants' claim differentiation argument does not render any language superfluous. In particular, Defendants argue that the "corresponding" claim of the '649 patent requires "updating of graphics data for only a 'subset of product,' " thus implying that the use of "updating constant data" (without the words "only for a subset of product") in a related, but different patent should mean something different. Dkt. No. 183 at 35. The Court disagrees. When read in appropriate context, the '649 claim language reciting "for only a subset of product data" is meaningful by making the claim more narrow than an analogous claim in the same patent without that language.FN20 Thus, there are no "superfluous" words. In addition, since Defendants' " ***all*** constant data" proposal is neither expressly nor impliedly required by the claim language, the Court does not broaden the claim beyond its correct scope. Ultimately, this Court declines to apply claim differentiation for the purpose of adding a limitation to claims in related, but different patents.

Having considered the disputes between the parties with respect to these terms, the Court construes the terms as follows:

(1) The Court adopts Judge McKinney's definition of "updating" because it will provide assistance to the jury. Thus, the term "**updating" means "an automatic process of adding, modifying, or deleting data records or program files to bring the remote computer up-to-date.**"

(2) The term (from the '490 Patent, asserted claims 9 and 12): "**Updating constant data stored in the memory of the remote computer with constant data maintained in the memory of the main computer that is different from the constant data stored in the memory of the remote computer" means "Transmitting updated constant data from the main computer to the remote computer without the transmission of constant data that has not been updated; and, updating at least a portion of constant data in the memory of the remote computer with different constant data from the main computer.**"

Furthermore, the Court finds that there is no applicable contingent language in this term. Thus, this limitation is only infringed if the step is actually performed at least once, and the Parties are instructed to argue accordingly at trial.

(3) The term (from asserted claims 2 and 3 of the '649 Patent): "**Transmitting only updated graphics data from the second subset of product data that is different from the graphics data in the first subset of product data from the main computer to the remote computer" means "Transmitting updated graphics data from the main computer to the remote computer without the transmission of graphics data that has not been updated. The transmission includes only portions of graphics data that are both (i) from the second subset of product data, and (ii) different from the portions of the first subset that are being updated.**"

Furthermore, the Court finds that this limitation is only infringed if the step is actually performed at least once *(i.e.* updated data is transmitted). While this limitation contains the contingent word "only," that word merely speaks to what data is sent-the transmission step of the claim is not contingent. The Parties are instructed to argue accordingly at trial.

(4) The term (from asserted claim 18 of the '649 Patent): "**Transmitting only updated constant data from the second subset of product data that is different from the constant data in the first subset of product data from the main computer to the remote computer" means "Transmitting updated**

constant data from the main computer to the remote computer without the transmission of constant data that has not been updated. The transmission includes only portions of constant data that are both (i) from the second subset of product data, and (ii) different from the portions of the first subset that are being updated."

Furthermore, the Court finds that this limitation is only infringed if the step is actually performed at least once (*i.e.* updated data is transmitted). While this limitation contains the contingent word "only," that word merely speaks to what data is sent-the transmission step of the claim is not contingent. The Parties are instructed to argue accordingly at trial.

(5) This term (from asserted claim 1, 6, 11, 17 & 20 of the '142 Patent): "**Transmitting updated constant data from the main computer to the remote computer if the constant data stored in the memory of the remote computer is different from the constant data stored in the memory of the main computer" means "If there is any difference between (i) the constant data stored in the memory of the main computer and (ii) the constant data stored in the memory of the remote computer, then transmitting updated constant data from the main computer to the remote computer without the transmission of constant data that has not been updated.**"

Furthermore, while the Court's definition makes clear that the transmitting limitation is contingent upon finding differences between the remote and main computer, as discussed in the example above, the next claim limitation regarding "storing" must actually be performed for there to be infringement. The Parties are instructed to argue accordingly at trial.

H. "Updating portions of the program stored in the memory of the remote computer that are different from the program stored and maintained in the memory of the main computer."

This limitation occurs in asserted claim 12 of the '490 Patent (depends from claim 1).

(i) The Parties' Positions

Hill argues that this limitation does not require a construction, although the definition of the term "updating" should apply within this term. JCCC at 10. Defendants propose that the term means "[t]his step requires that the updated portions of the program be transmitted from the main computer." Id. The disagreement between the parties here clearly relates to whether program updates have a mandatory source and whether that source is the "main computer."

(ii) The Court's Construction

Defendants advance two arguments to support a construction requiring that program updates "be transmitted ***from*** the main computer." First, Defendants argue that "an interpretation that the updates may be sent from somewhere other than the main computer would render other elements of the claim meaningless." Dkt. No. 183 at 37. More specifically, Defendants assert that if the program updates do not come from the main computer, then the claim limitations are meaningless when calling for "maintaining" both "the latest revision of the program" and the "revision status" on the main computer. The Court disagrees because, regardless of the "updating" limitation, the other limitations still have all the meaning that their literal words require-that the main computer maintain the latest revision of the program and the program status. The Court notes that Defendants may be attempting to raise a practical question regarding why the main computer should maintain the latest revision of the software if the update comes from another source. This question however

does not justify Defendants' proposal because the claim makes perfect practical sense in that it ***allows*** for the update to come from the main computer.

Defendants also argue that the specification confines the invention to providing program updates from the main computer. *Id*. *("[T]he* patentee's characterization of the alleged invention-not merely a preferred embodiment-confirms that the remote computer communicates only with the main computer."). Defendants further explain that "[t]he 'total system architecture' of the invention consists of the customer's computer and vendor's computer' " and" [t]he patents never suggest that the customer may connect to a third-party computer in order to receive any data or program updates." *Id*. at 37-38. The Court, however, is not persuaded that Defendants' citations in the specification are sufficiently confining or definitive to alter the ordinary meaning of the claim terms, which do not require any particular source for the program updates. On the matter of the claim wording, the Court agrees with Hill that the " *program updating limitation* identifies neither the source of data with which the remote computer is updated nor how such *updating* is accomplished." Dkt. No. 174 at 34.

In addition to noting the literal claim wording, Hill argues that in other contexts, the claim drafter used the word "with" to require a source for data: "updating ... the remote computer ***with*** constant data maintained in the memory or the main...." *Id*. (citing '490 Patent claim 1) (emphasis added). Hill asserts that the word "with" is absent in the program update portion of the claim, thus implying a broader meaning. Id.

The Court finds that the claim 12 does not require a particular source for the program updates. **Having resolved the dispute between the parties, the Court declines to construe this term as a jury would not be aided by a construction beyond the literal claim language**FN21

I. "Product Information"

The parties propose several terms related to "product information" as follows: "product information," "information data," "product information data," "information data related to at least one product," "information related to at least one product," "product information data related to a selected product," "product data," and "information related to a product." JCCC at 2. One or more of these terms occurs in the '490 Patent, asserted claim 1, the '649 Patent, asserted claims 1, 2, 3, 16 & 18, and the '142 Patent, asserted claim 1.

(i) The Parties' Positions

Hill proposes that each of the terms be defined as "meaningful and useful facts about a tangible good." JCCC at 2. Defendants propose the definition, "a combined set of all [constant/graphics' data and all [variable/textual] data relating to one or more products that together constitute all data relating to the product(s)." Id. As evident from the competing proposals, the parties disagree about whether references to product information necessarily means "all" product information that exists and whether it is only in the form of "all [constant/graphics] data and all [variable/textual] data."

(ii) The Court's Construction

Defendants submit that "[a]s recited in the claims, 'information data,' 'product information' and other terms at issue ... consists of two types of data-constant data and variable data, or, in the '649 Patent, graphics data and textual data...." Dkt. No. 183 at 29. Further, Defendants argue that "[n]either the claims nor the specification requires or even discloses that data other than constant/variable or graphics/textual data may be

included in product information. Product information therefore is the combination of constant data and variable data for a given product or products, or, in the case of the '649 Patent, the combination of graphics data and textual data for a given product or products ...., and nothing else." Id. The Court disagrees with Defendants. While the claims often recite "constant/graphics data" and "variable/textual" data as components of product information, nothing in the claims or specification limits product information to those components. In addition, Defendants' proposal that product information must include "all data relating to the products" would mandate that the claimed product information include an infinite category of information (such as third party information) about the products. This type of result is not suggested by the claims or specification and Defendants offer no evidence that supports the contention.FN22

Hill argues that "[t]he parties have agreed that *product* should be defined as a 'tangible good' ... [and][i]t naturally follows, then, that *product information* is information about a tangible good." Dkt. No. 174 at 35. While the Court agrees with Hill on this point, the Court finds the excess language in Hill's proposal to be vague and unuseful.

Accordingly, the Court construes each of the product information terms listed above to mean "information about a tangible good."

J. "Updated Constant Data" and "Updated Graphics Data"

The term "updated constant data" appears in asserted claim 18 of the '142 Patent and asserted claims 1, 6, 11, 17 & 20 of the '649 Patent.

(i) The Parties' Positions

Hill's primary position is that the terms do not require construction although alternatively submits the following definitions: "updated" means "added or modified," and "updated ... data" means "added or modified [constant/graphics] data [from the second subset of product data/at the main computer] that is different from the [constant/graphics] data in the [first subset of the product data/at the remote computer]." JCCC at 6. Defendants propose the definition, "items of [constant/graphics] data that exist on both the main computer and the remote computer that have been revised on the main computer since the version on the remote computer was stored." Id.

Effectively, the parties disagree regarding whether "updated" data may include information about new items.FN23

(ii) The Court's Construction

Both of these terms occur in their identical form as part of the "updating and transmitting" limitations previously discussed. The parties raise these terms in order to address Defendants' contention that "updated" information may not include any new items. To support this contention, Defendants' first argue that "[i]t would require an unusual redefinition of the general understanding of the word 'updated' to cover the pure addition of entirely new catalog data." The Court disagrees. The claims expressly call for updates of "graphics data" or "constant data," which are both broad enough terms to encompass new product items. In other words, to support Defendants' argument regarding use of the ordinary word "updated," a putative claim might state: "updated graphics data regarding pre-existing items."

Defendants' second argument is that Judge McKinney's holding supports their proposal. In particular,

Defendants argue that Judge McKinney explained, "the term 'updated' refers to the 'condition of an item.' " Thus, Defendants conclude that "[f]or the adjective 'updated' to 'refer[ ] to the condition of an item,' the item must exist before it is 'updated.' " Dkt. No. 183 at 39 (citations omitted). The Court disagrees because, as stated above, the claims call for updated "graphics data" or "constant data," not "updated items." Furthermore, Judge McKinney's comments validate this conclusion because he confirmed that the word "updated" "is used as an adjective, modifying 'portions of' the constant data and programs stored in the main computer .... updated refers to the condition of an ***item.***" *CompuServe I,* No. IP97-04340C, slip op. at 29 n.8 (S.D. Ind. April 9, 1999) (emphasis added). Judge McKinney used the phrase "an item" in the sense of "something." He did not use the word "item" to indicate that "updated" could only refer to a single product. *Id*.

Next, Defendants argue that the invention "would make no sense if updated data could mean entirely new catalog data." Dkt. No. 183 at 40. In this regard, Defendants reason that new items would have no "revision level" on the remote computer; thus, "there is no revision status on the customer's computer with which to compare and the updating mechanism described in the specification cannot work." *Id*. The Court disagrees with this reasoning. The portions of the claim requiring operations with respect to revision status do not alter the ordinary meaning of "updated" data. Furthermore, the revision level is not necessarily applied to a single item-"[t]he remote revision status indicates the revision level of the constant data stored in the remote computer." '490 Patent at 5:43-45.

Finally, Defendants argue that Hill's System is described as "an improvement over a pure dial-up system in which new data is transmitted every time." Dkt. No. 183 at 40. Thus, Defendants assert that sending "entirely new catalog data over a phone line runs entirely counter to the patents' announced goal of limiting dial-up time and avoiding the transfer of large blocks of graphics data." *Id*. The Court disagrees with this analysis. The cited statements in the "Background Of The Invention" and "Summary Of The Invention" provide no basis for limiting the meaning of "updated data." The patent is clear that the invention was "designed to ***reduce*** the problems associated with" the prior art. '490 Patent at 1:40-41 (emphasis added). Furthermore, Defendants' proposal would result in the patentee's claims covering only items that entirely "eliminate" one specific prior art problem in one specific way. FN24 With this Court cannot agree.

The Court declines to define the terms "updated constant data" and "updated graphics data" beyond the definitions provided above for the larger terms incorporating these words. The Court concludes that construction beyond the literal claim language would not be helpful and may even hinder a jury.

K. "Transmitting"

The term "transmitting" occurs in asserted claims 9 and 12 of the '490 Patent, asserted claims 3 and 18 of the '649 Patent, and asserted claim 1 of the '142 Patent.

(i) The Parties' Positions

Hill's primary position is that no definition is needed, but submits an alternative definition of "sending." JCCC at 6. Defendants propose the definition, "transmitting over an end-to-end phone line connection between the main computer and the remote computer." As evident from the proposals, the parties disagree regarding whether the term "transmitting" should be confined to a phone line.

(ii) The Court's Construction

Defendants argue that "transmitting" should be confined to a phone line because "[t]he patents' repeated references to phone lines are not mere descriptions of preferred embodiments; rather, phone communications lie at the heart of the objectives and purposes of Hill's purported 'invention.' " Dkt. No. 183 at 45. The Court disagrees that telephone communications are mandated by the claims in view of the specification's many references to telephone lines. The specification also clearly provides for other communications mediums. As Hill points out, "the specification of the Hill Patents is explicit that 'communications between vendor's [i.e., the main] computer 12 and customer's [i.e., the remote] computer 18 could also be implemented on a wide area network (WAN) in which several different communication tools could be used. These communication tools include, for example, multiple local area networks, satellite communications, land lines, and optic lines.' " Dkt. No. 187 at 22 (citing '490 Patent at 11:35-41).

Defendants also assert that Hill made confining representations in the prosecution history: "The present invention stores some amount of constant data on customer's remote computer. This constant data can be either loaded onto customer's computer using a disk or transferred to customer's computer via telephone lines." Dkt. No. 183 Exh. B-1, at 5. However, as Defendants acknowledge, the quoted file history does not relate to the term "transmitting." Dkt. No. 183 at 47, n.6 ("Loading data via a disk, of course, is how the data is initially stored on the remote computer, and does not involve a transmission from the main computer .").

Finally, Defendants assert that the Court should follow the holding in Microsoft Corp. v. Multi-Tech Sys., Inc. 357 F.3d 1340 (Fed.Cir.2004). The dispute in *Multi-Tech* was similar in that "the parties' dispute [was] over the 'sending,' 'transmitting,' and 'receiving' limitations[, which] reduce[d] to a single issue: whether those limitations are restricted to communications over a telephone line or whether they may encompass communications over a packet-switched network such as the Internet." Multi-Tech, 357 F.3d at 1346. However, the *Multi-Tech* case materially differs from the instant situation in that, with respect to the specification in *Multi-Tech,* the Federal Circuit found "[n]owhere does it even suggest the use of a packet-switched network." *Id.* at 1348. As noted above, the Hill Patents expressly state that "communications between vendor's computer 12 and customer's computer 18 could also be implemented on a wide area network (WAN) in which several different communication tools could be used. These communication tools include, for example, multiple local area networks, satellite communications, land lines, and optic lines." '490 Patent at 11:35-41. Thus, *Multi-Tech* does not govern here.FN25

While the Court agrees with Hill that "sending" is a fair synonym for "transmitting," the Court also finds that clarity is better served by using the original and plain claim term "transmitting." Accordingly, the Court declines to define this term.FN26

L. "Integrating," "Generating" and "Displaying"

The '490 Patent, asserted claims 9 and 12, which depend from claim 1, contains the claim 1 term, "integrating constant data related to the at least one product with the variable data related to the at least one product in the remote computer to generate the information data related to the at least one product including both constant data and variable data."

The '649 Patent, asserted claims 2 and 3, which depend from claim 1, include the claim 1 term "combining the textual data from the second subset of product data received from the main computer with graphics data related to the selected product stored in the memory of the remote computer to provide complete product information data related to the selected product including both graphics and textual data."

The '649 Patent, asserted claim 2, which depends from claim 1, includes the term "displaying the complete product information data at the remote computer."

The '649 Patent, asserted claim 18, which depends from claim 16, includes the claim 16 term "combining the variable data received from the main computer with constant data related to the selected product stored in the memory of the remote computer to provide complete product information related to the selected product ."

The '142 Patent, asserted claims 1, 6, 11, 17 & 20 include the term "Integrating constant data stored in the memory of the remote computer with the variable data received from the main computer using the display information received from the main computer to format the constant data and the variable data to generate the product information data related to the at least one product."

The '142 Patent, asserted claim 1, includes the term "displaying the product information data generated by the remote computer during the integrating step on the monitor coupled to the remote computer."

The terms, "integrating" and "generate" occur within the terms above. The term "generating" occurs in asserted claims 9 and 12, which depend from claim 1 of the '490 Patent.

(i) The Parties' Positions

Hill submits the term "integrating" and the corresponding definition from *CompuServe I,* "merging or uniting in a meaningful way." Hill also submits the terms "generate," "generating," and "generated" with a corresponding definition from Judge Ward, "producing by performing specific operations." Defendants only offer definitions for the entire limitations and not "generate," "generating," or "integrity" alone.

Defendants submit proposed constructions for the four complete elements beginning with "integrating" or "combining" (quoted above) and propose the same corresponding definition: "prior to any display of product data, processing all of the [variable/textual] data and all of the [constant/graphics] data relating to the product(s) so as to produce a complete and displayable set of product data." Hill contends these terms do not require construction.

Defendants also submit the two longer terms beginning with "displaying" (quoted above) and propose the same corresponding definition: "displaying the set of product data produced after the full completion of the [combining/integrating] step." Hill contends these terms do not require construction.

(ii) The Court's Construction

The dispute regarding these terms relates to the timing of the "integration." Specifically, the parties disagree about whether the initial "combining" or "integrating" steps in the referenced claims must be entirely completed before the "displaying" step begins. Thus, the issue hinges on the order of steps that a method claim requires. The Federal Circuit has provided guidance that any order required among method steps is dictated by either (i) the grammar or logic of the claim words, or (ii) the patentee's indication, including disavowal or disclaimer to deviate from the claim words:

Interactive Gift recites a two-part test for determining if the steps of a method claim that do not otherwise recite an order, must nonetheless be performed in the order in which they are written. First, we look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order

written. For example, in Loral Fairchild Corp. v. Sony Electronics Corp., 181 F.3d 1313, 1321, 50 USPQ2d 1865, 1870 (Fed.Cir.1999), we held that the claim language itself indicated that the steps had to be performed in their written order because the second step required the alignment of a second structure with a first structure formed by the prior step. If not, we next look to the rest of the specification to determine whether it "directly or implicitly requires such a narrow construction." If not, the sequence in which such steps are written is not a requirement. The appropriate use of the rest of the specification in claim construction has not always been clear. Several recent cases, however, have clarified the subject. In *Texas Digital,* we noted that the specification may be useful in determining a claim term's ordinary meaning where a dictionary has been consulted but it becomes necessary to choose between multiple definitions. In *CCS Fitness,* we discussed, more generally the use of the specification to rebut the presumption that a claim term carries its ordinary meaning:

First, the claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history. Second, a claim term will not carry its ordinary meaning if the intrinsic evidence shows that the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention. Third ... a claim term also will not have its ordinary meaning if the term "chosen by the patentee so deprives the claim of clarity" as to require resort to the other intrinsic evidence for a definite meaning. Last, as a matter of statutory authority, a claim term will cover nothing more than the corresponding structure or step disclosed in the specification, as well as equivalents thereto, if the patentee phrased the claim in step- or means-plus-function format.

Essentially then, "claim terms take on their ordinary and accustomed meanings unless the patentee demonstrated an intent to deviate from [that meaning]." It follows from that proposition that "the number of embodiments disclosed in the specification is not determinative of the meaning of disputed claim terms." Nor are claims ordinarily limited in scope to the preferred embodiment. These principles apply with equal force where, as is the case here, the limitation to be imported from the specification is an **order** of **method steps,** rather than a limitation on a specific claim term.

Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1370 (Fed.Cir.2003) (internal citations omitted).

The claims at issue here all require that data is "combined" or "integrated" on the remote computer and that there is a display of the resulting "combined" or "integrated" data. For example, consider the following claim:

A method for ***displaying*** product information ... comprising:

integrating constant data stored in the memory of the remote computer with the variable data received from the main computer using the display information received from the main computer to format the constant data and the variable data to ***generate the product information*** data related to the at least one product; and

displaying the product information data generated by the remote computer during the integrating step on the monitor coupled to the remote computer.

'142 Patent, claim 1 (emphasis added).

The crux of Defendants' argument is that because the "displaying" step uses the result of the "integrating"

and/or "generating" steps, the claim explicitly requires a certain order of steps. Dkt. No. 183 at 44-45 ("Claim 2 of the ' 649 Patent requires the displaying of the 'complete product information.' The 'complete product information' results from the completion of the last, 'combining,' step of claim 1. Similarly, in claim 1 of the '142 Patent, the 'integrating' step results in 'product information data,' which is the data that is displayed in the last step. Thus, the steps implicitly require that they are completed in the order written, and must be interpreted as such."). However, Defendants' rationale breaks down when considered in view of their proposed construction. In particular, Defendants' proposal requires that integration and/or generation be **entirely *complete*** before **any** display may begin. The Court finds that the steps do not require the Defendants' proposed order. The claim words do not grammatically or logically prohibit the use of partially integrated and/or generated results in order to begin the display step before the completion of the integrating and/or generating step. *See* Moba, B. V., v. Diamond Automation, 325 F.3d 1306, 1314 (Fed.Cir.2003) ("Nowhere does the plain language of claim 24 require separate and consecutive performance of the various guiding steps.").FN27

The Defendants also argue that the specification shows "separate steps" in Figure 11B and the description:

The Hill Patents require that 'two distinct steps' occur after the variable data and updated constant data for a given product or products are received at the remote computer. The "first step" is to combine or integrate the variable data and constant data to generate display data. The "second step" is to display that data on a printer or screen. The specification further explains that the first step requires the remote computer to "process the data." The need to "process the data" indicates that the data is not in a displayable form until the processing is complete, which, again, is consistent with Defendants' proposed construction.

Dkt. No. 183 at 43-44 (internal citations omitted).

Notably, Defendants point to nothing in the intrinsic record that *mandates* the proposed order of steps or suggests that the inventor intended such an order. The preferred embodiment in the Hill Patent is unavailing to Defendants because the Federal Circuit "has expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." Liebel-Flarsheim c. v. Medrad, Inc. 358 F.3d 898, 906 (Fed.Cir.2004). In *Altiris,* quoted above, "despite the fact that the specification discussed only a single embodiment, [the Federal Circuit] held that it was improper to read a specific order of steps into method claims because the specification "nowhere [included] any disclaimer of any other order of steps, or any prosecution history indicating a surrender of any other order of steps." *Id*.

Having resolved the dispute among the parties, the Court declines to define any terms beyond those defined by Judge Ward and Judge McKinney as any further definition would not be helpful to the jury.FN28 Thus, **the Court construes "integrating" to mean "merging or uniting in a meaningful way." The Court construes the term "generating" to mean "producing by performing specific operations."**

M. "Selecting At Least One Product At The Remote Computer"

This term appears in asserted claims 2, 3 FN29 and 18 FN30 of the ' 649 Patent.

(i) The Parties' Positions

Hill proposes the definition: "product selection must be from products stored in memory on the remote computer." Defendants propose: "Product selection must be from products stored in memory on the remote

computer. This means that the customer selects from a list of one or more products generated by the remote computer from those products stored in memory of the remote computer." The parties disagree regarding the applicability of the second sentence in Defendants' proposal.

(ii) The Court's Construction

Judge Ward construed this term in the *Amazon* case as "product selection must be from products stored in memory on the remote computer." Amazon, 2005 WL 2483510, at * 14. Hill's proposal is identical to Judge Ward's determination and Defendants' proposal is the same except for the clarification sentence. Thus, the parties generally agree with Judge Ward but dispute the particulars. Specifically, the parties disagree regarding whether the "selecting" term requires that (i) ***a customer,*** (ii) make the selection ***from a list.***

Hill argues that Defendants' "list" limitation is inappropriate because the "[p]atents make clear that 'selection' can even refer to the choice of a *single* option...." Dkt. No. 174 at 50 (citing '490 Patent at 16:4-6) ("Customer's computer 18 reads the selected category input at block 262 and decides whether or not a graphical query has been selected at block 264."). The Court agrees with Hill that the term does not mandate a list. In addition, the Court finds no support for adding the "customer" requirement to this limitation.

Curiously, notwithstanding their proposed construction, Defendants characterize the dispute here as whether Judge Ward's construction "permits the selection to be made from product data on the main computer that coincidentally happens to be "stored in the memory of the remote computer." Dkt. No. 183 at 41. Defendants appear to expand on this point, arguing that "a system in which the main computer transmits the choice of products to the remote computer for selection by the customer would not fall within Judge Ward's construction because the customer would be selecting a product from the main computer memory-not from the remote computer memory." *Id*. at 42. The Court agrees with Defendants that the claim requires the selection to be made from products stored in the memory of the remote computer; however, this is precisely clear meaning of Judge Ward's construction. The Court notes that Judge Ward also discussed the issue of browsing the main computer memory: "[t]here is nothing in the claim language which necessarily precludes or disavows coverage of a system which permits the customer to browse main computer memory before or after making a product selection, so long as the claim limitations are otherwise met." This Court agrees with Judge Ward and thus adopts his construction. **The Court construes the term "selecting at least one product at the remote computer" to mean "product selection must be from products stored in memory on the remote computer.**"

N. "Map"

This term appears in asserted claim 9 FN31 of the ' 490 Patent and asserted claims 3 and 18 FN32 of the ' 649 Patent.

(i) The Parties' Positions

Hill proposes that the Court adopt Judge Ward's definition for "map": "instructions to integrate or combine data on the remote computer which establish the relative positions of, or the spatial relations or distributions of data to be displayed on the remote computer." JCCC at 9. Defendants propose: "a separate file containing instructions to integrate [variable/textual] data and [constant/graphics] data, having the structure shown in column 20, lines 51-66 of the '490 Patent and in column 20, lines 41-58 of the '649 Patent." The Parties disagree regarding whether the "map" must have the structure as the disclosed in the embodiment of column 20 of the '490 Patent.

(ii) The Court's Construction

Defendants argue that the patentee "acted as his own lexicographer" in defining the term "map." Dkt. No. 183 at 52. Defendants support this contention with the following observations: (i) the patents use the term "map" in quotes, like a defined term; (ii) the "structure" incorporated in Defendants' proposal is under the heading "Definition Of MAP FILE"; and (iii) Hill uses the term "display information" for more general reference to "the integration of the constant and variable data." *Id* at 52-53.

Hill argues that Judge Ward's definition is accurate and supported by the specification. Dkt. No. 174 at 53 ("Judge Ward's definition is supported by, and consistent with, the specification of the Hill Patents."). Judge Ward analyzed the issue as follows:

The next disputed term is the "map" limitation. In the context of the claims, the vendor's computer generates a map which tells the remote computer how to arrange the data. The plaintiff proposes a construction for this term to mean "instructions to integrate or combine data on the remote computer." The defendants define map to mean "[a]n ASCII text file that includes (1) X and Y coordinates of the lower left corner and (2) X and Y coordinates of the upper right had corner for each collection of text and/or graphics data for display." The plaintiff disputes the definition proposed by the defendants as incorporating too many limitations from the preferred embodiment. The defendants urge that the patentee explicitly defined map in the '490 patent, col. 20, ll. 15-18, as they have defined it. Although column 20, ll. 15-18 provides a definition of the preferred embodiment of the map file, the court is not convinced that the details of this example should be read into the claims as limitations. Instead, in the context of the claims, the term "map" means "instructions to integrate or combine data on the remote computer which establish the relative positions of, or the spatial relations or distributions of data to be displayed on the remote computer."

Amazon, 2005 WL 2483510, at *15-16.

This Court agrees with Judge Ward and disagrees with Defendants. The use of quotation marks on the word "MAP" does not indicate an express definition in the heading at column 20, line 51 of the '490 Patent. The "MAP FILE" disclosed (or "defined") under the cited heading is an embodiment of the "map," not a definition of the term. This is evident both from the overall context and the statement indicating that this is "[a]n example for the electric motor data sheet generation is as follows:" '490 Patent at 20:19-20. Furthermore, the specification introduces the "Definition Of Map File" as an embodiment of a "definition file": "The actual display of the data involves the use of a definition file (<File>.DEF). This file is the "map" that provides the instructions required to integrate all of the data on customer's computer 18. The definition file is an ASCII text file in which each line of text refers to one specific display file, and the manner in which it is to be displayed." *Id*. at 20:44-50.

Finally, the term "map" (without "file" appended) is also used with and without quotes in a much broader context throughout the patent: "vendor's computer transmits a map to the customer's computer which permits the customer's computer to integrate the variable data received from the vendor's computer with constant data related to the selected product stored in the customer's computer" FN33; "a map ... to permit the remote computer to perform the integrating step" FN34; "a map to permit customer's computer 18 to integrate the variable data with constant data on customer's computer ...." FN35; and "The following is a description of the "map" created by vendor's computer 12 to permit customer's computer 18 to integrate both constant and variable data into a single data sheet." FN36

The Court finds that Judge Ward's definition accurately captures the meaning of "map" and thus, adopts that definition. **The Court construes the term "map" to mean "instructions to integrate or combine data on the remote computer which establish the relative positions of, or the spatial relations or distributions of data to be displayed on the remote computer.**"

O. "Identifying"

The following term appears in asserted claims 2 and 3 of the '649 Patent, which depend from claim 1 where the term is actually used: "Identifying a second subset of product data including graphics data and textual data related to the selected product from the product data stored in the memory of the main computer based on the data request query." The following related term appears in asserted claims 17 and 20 of the '649 Patent, which depend from claim 16 where the term is actually used: "Identifying a second subset of product data including constant data and variable data related to the selected product from the product data stored in the memory of the main computer based on the data request query."

(i) The Parties' Positions

Hill's primary position is that no construction is required although Hill alternatively proposes "indicating a second subset of data including [graphics/constant] data and [textual/variable] data related to the selected product from the product data stored in the memory of the main computer based on the data request query." Defendants propose: "the main computer uses the data request query to verify that the [graphics/constant] data and [textual/variable] data related to the selected product is stored in the memory of the main computer." Thus, the primary disagreement between the parties relates to whether "identifying" requires "verifying."

(ii) The Court's Construction

Defendants relate the "verify" requirement to the claim language, arguing that "in the context of the claim, the step of 'identifying' this data for later transmission to the remote computer is meaningful only to the extent that the main computer verifies that responsive data-including both variable (or textual) data and constant (or graphics) data-is stored on the main computer." Dkt. No. 183 at 43. In support, Defendants' note:

This understanding of the identifying step is also consistent with the specification. The specification states that if the vendor's computer determines that the constant data on the remote computer is not up-to-date, the "vendor's computer ... compiles updated constant data files." Similarly, the specification explains that after receiving a request for variable data from the remote computer, "[v]endor's computer ... builds a data file for transmission of variable data." Thus, the step of "identifying" requires that the vendor's computer verify that there is responsive data that may be transmitted to the remote computer.

Id. at 44 (internal citations omitted).

The Court disagrees with Defendants. The word "verify" is not an accurate synonym for the term "identify," nor does it present less ambiguity to the fact finder. Furthermore, the word "verify" is not found in Defendants' citation or elsewhere in the relevant intrinsic record.

The claims call for "identifying" data related to a selected product "based on the data request query." The

Court finds this use of "identifying" is a very broad usage. Thus, "identify" in this context may include reading, writing, verifying, finding, compiling or simply recognizing the existence of something. Hill provides a definition of "identification" as " 'An act of identifying: the state of being identified; evidence of identity.' " Dkt. No. 174 at 53 (quoting WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 597 (1987)). While the Court declines to define this term, the parties are instructed to conform their trial arguments to the Court's comments herein, including the appended definition. FN37

P. Order of Limitations in Claim 1 of the '490 Patent

The parties dispute the order of steps of the method claim 1 of the '490 Patent. Asserted claims 9 and 12 depend from claim 1, which is an independent claim that is provided below annotated with numbers indicating the contested steps:

A method for generating information related to a product, the method comprising the steps of:

[**STEP 1**] storing and maintaining variable data and constant data related to at least one product and a main revision status in a memory of a main computer, the main revision status indicating the revision level of the constant data stored in the main computer;

[**STEP 2**] storing constant data related to the at least one product and a remote revision status in a memory of a remote computer, the constant data being a subset of information data related to the at least one product, the remote revision status indicating the revision level of the constant data stored in the remote computer;

[**STEP 3**] transmitting the remote revision status from the remote computer to the main computer;

[**STEP 4**] comparing the remote revision status with the main revision status;

[**STEP 5**] updating constant data stored in the memory of the remote computer with constant data maintained in the memory of the main computer that is different from the constant data stored in the memory of the remote computer;

[**STEP 6**] transmitting variable data related to the at least one product from the main computer to the remote computer; and

[**STEP 7**] integrating constant data related to the at least one product with the variable data related to the at least one product in the remote computer to generate the information data related to the at least one product including both constant data and variable data.

'490 Patent, claim 1.

(i) The Parties' Positions

Hill proposes that "[s]teps 1-4 occur in the sequence recited in the claim, step 5 occurs after step 4 and before step 7, step 6 is limited only by being after step 2 and before step 7." JCCC at 10. Defendants propose the same order that both Judge McKinney and Judge Ward previously imposed: "Steps 1-4 must be performed in order and before steps 5-7. Steps 5 and 6 are interchangeable but must be performed before step 7." Id. Thus, the parties disagree regarding whether step 6 must occur after step 4 or merely after step 2.

(ii) The Court's Construction

Defendants' position here is bolstered by the findings of two prior Federal Courts. In particular, in CompuServe argued for "some order" while Hill contended that "order does not matter." CompuServe I, 65 F.Supp.2d at 949. With that context, Judge McKinney analyzed:

Constant and variable data, as well as a constant revision status, must be stored on the main computer before any subsequent operations may occur. Thus, the first step recited in Claims 1 and 15 must actually occur first. The second recited step, relating to storing constant data on the remote computer, conceivably could occur simultaneously with the first step, but it would be illogical for it to occur prior to the time that constant and variable data were stored on a main computer. Practically speaking, there must first be an electronic catalog system before a customer would be likely to desire access to it. Likewise, unless all constant and variable data were in the memory of a main computer, any attempt by a remote computer to access such data would meet with a significant delay while the data was stored on the main computer.

Step three involves transmitting a remote revision status from the remote computer to the main computer, which step must follow the second step, in which a remote revision status is stored on the remote computer. Logically, one cannot transmit what is not there. Similarly, the recited step three must occur before the step four, which involves comparing the remote revision status with the main revision status. Such a comparison could not occur unless the remote revision status had already been sent to the main computer. Step five, which covers the process of updating constant data on the remote computer with constant data on the main computer that is different, cannot be performed until after the comparison between the two revision statuses. Without the comparison, there would be no way of determining if the constant data on the remote computer was different from that on the main computer.

It is not so clear, however, whether step five (updating constant data) must precede step six (transmitting variable data). Although both the constant data update and the variable data transmission must occur before the two computers disconnect, and before both sets of data are on the remote computer, there is nothing that would logically or practically prohibit the transmission of one before the other. According to Hill's expert, the invention would still work regardless of the order of their arrival at the remote computer, and there is no technological reason for a specific order. Regardless of the order of arrival of the updated constant data and the specific variable data, all must have been transmitted from the main computer to the remote computer before the integration step can occur to produce a display of the product information. Thus, step seven must follow all of the preceding steps.

In sum, logic and practicality dictate that in Claim 1 the method steps one through four must occur in the sequence recited by the claim. They also must occur prior to steps five through seven. Likewise, steps five and six both must have occurred before step seven may be accomplished. However, the steps involving updating the constant data on the remote computer and transmitting variable data related to at least one product are interchangeable. The specification describes these steps only in the order recited in the claim, yet nothing in the specification mandates that order. Hill's expert agreed that these two steps could occur in any order, just as long as they both occurred before step seven, the integration step. The order of transmission of updated constant data and specific variable data was a primary area of dispute between the parties, with Compuserve arguing that the order given in the claims must be followed, and Hill stating that the order did not matter. The Court finds that with respect to these two steps only, the order given in the claims is not mandated by the claim language, or logic or practicality.

CompuServe I, 65 F.Supp.2d at 950-51 (emphasis added) (internal citations omitted).

In reviewing Judge McKinney's Order, this Court believes that the question regarding whether step 6 could occur before step 4 was never substantively addressed. After determining that revision status comparison was necessary before step 5, Judge McKinney merely reasoned that "[i]t is not so clear ... whether step five (updating constant data) must precede step six (transmitting variable data)." Id. at 950. Thus, the Order suggests that Judge McKinney never considered whether steps 3 or 4 (transmitting and comparing revision status) are required predicates to step 6 (transmitting variable data).

After the *CompuServe I* case, Judge Ward was asked to consider whether his "court should modify Judge McKinney's construction to require that the step of transmitting variable data (step six) is limited only by being after the step of storing constant data (step 2) and before the step of integrating constant data (step 7)." Amazon, 2005 WL 2483510, at *19. Judge Ward also did not analyze this question, finding instead that "Hill elected to dismiss with prejudice his Indiana litigation and, in doing so, waived any right to complain about the correctness of Judge McKinney's construction." *Id*.

This Court agrees with the analysis of Judge McKinney, but supplements that analysis by considering whether step 6 may be performed at any point prior to step 4. In step 3, revision status is transmitted "from the remote computer to the main computer." '490 Patent, claim 1. Since "revision status" merely indicates "the revision level of the constant data stored in the remote computer," there is no grammatical or logical reason that step 3 must occur before step 6, which deals only with transmitting "variable data." Id. In step 4, the remote revision status is compared with the main revision status. Since "revision status" does not necessarily involve "variable data," there is also no logical or grammatical reason why step 4 must occur before step 6. Thus, step 6 is limited only by being after step 2 and before step 7.

Based upon the record before this Court, the doctrines of waiver or estoppel are not issues here. The issues were not briefed and the Court inquired with both parties at the hearing. The Plaintiff stated:

Mr. Carter: ... there is no reason why in the logic of this claim, no reason based on any requirement in the specification that the variable data cannot be transmitted before the remote revision status is transmitted or the comparison of the remote revision status occurs at the main computer with the main revision status.

The Court: Now was this issue addressed by the Federal Circuit?

Mr. Carter: It was not....

The Court: And I guess my question is, why would some sort of estoppel not apply on this issue?

Mr. Carter: Because what was addressed by the Federal Circuit was a summary judgment ruling relating to the term storing and the term constant and variable data. This term was not part of that summary judgement ...

Mr. Carter:-it went to the Federal Circuit, but this term was not part of the summary judgment record. So you see cases at the Federal Circuit, they are talking about advisory opinions on claim terms that are not the subject of the motion. So the defendants have talked about us taking bites at the apple, which we have for many of these claim terms also accused them of doing the same thing, taking second

The Court: Well, maybe both parties are guilty to some degree.

Mr. Carter: right. But I haven't seen anything in the defendants' briefing where they think that some type of-

The Court: Estoppel applies.

Mr. Carter:-estoppel applies here because this wasn't part of the summary judgment record.

The Court: I see.

Dkt. No. 198 at 35-36. Later the Court inquired with Defendants:

Mr. Rainey: ... so the dispute here is really whether variable data may be transmitted from the main computer, that is, step 6, before the constant data is checked for updates, which is what steps 3 and 4 do. That's the essence of the dispute. Now both Judges McKinney and Judge Ward held that the variable data must be transmitted from the main computer after the constant data is checked by the updates. So quite simply, both of these judges have rejected the position that Hill is advocating, so we are now here for the third time with Hill arguing that we should do something different than the two prior claim construction rulings.

The Court: Do you agree with Mr. Carter that there is no estoppel effect of Judge McKinney's ruling?

Mr. Rainey: Yes. We are not advocating an estoppel effect because of the way the case resolved itself. These cases all ultimately resolve themselves on settlement. Though one could argue that they-had they had an issue with it that they could have taken it up on appeal to the federal circuit. They chose not to.

The Court: Yeah. And I didn't realize, during the break, I believe Judge Ward actually took that position in his ruling that there was some estoppel effect. I am not trying to create an issue that's not an issue.

Mr. Rainey: I don't even think we need to go there on this, Your Honor, because actually the summary of the invention, this is that section we keep focusing on before the preferred embodiments....

Id. at 85-87.

Thus, this Court declines to apply waiver or estoppel given the incomplete record on the issue and the absence of a request by the parties. **The Court construes that the steps of** '490 Patent **claim 1 must be practiced as follows: steps 1-4 occur in the sequence recited in the claim, step 5 occurs after step 4 and before step 7, step 6 is limited only by being after step 2 and before step 7.**FN38

Q. Order of Limitations in Claim 12 of the '490 Patent

The parties dispute the order of steps of the asserted method claim 12 of the '490 Patent (which depends from claim 1). Claim 12 is provided below with numbered annotations of the contested steps.

The method of claim 1, further comprising the steps of:

[**Step 1**] storing a program and a remote program revision status in the memory of the remote computer, the remote program revision status indicating the revision level of the program stored in the memory of the remote computer;

[**Step 2**] maintaining the latest revisions of the program and a main program revision status in the memory of the main computer, the main program revision status indicating the revision level of the program stored in the memory of the main computer;

[**Step 3**] transmitting the remote program revision status from the remote computer to the main computer;

[**Step 4**] comparing the remote program revision status to the main program revision status; and

[**Step 5**] updating portions of the program stored in the memory of the remote computer that are different from the program stored and maintained in the memory of the main computer.

'490 Patent, claim 12.

(i) The Parties' Positions

Hill's primary position is that there is no need to construe the order of claims, although Hill alternatively proposes that "[t]he steps of claim 12 may occur in any order relative to the steps listed in claim 1. The steps of claim 12 may be performed in any order with the exception that the step 3 occurs after step 1 and step 4 occurs after step 3." JCCC at 10. Defendants propose that "the steps of Claim 12 must be performed in order." Id. The parties thus disagree regarding whether any order is required by this claim.

(ii) The Court's Construction

The Court finds that Steps 1 and 2 need not occur in any order. Step 1 requires storing the program at the remote computer along with the remote revision level. '490 Patent, claim 12. Step 2 requires maintaining the ***latest revision*** of the program at the main computer along with the main program revision level. Id. The "latest revision" of step 2 ("maintained" on the main computer) can be the same as the program revision "stored" on the remote, in which case, there is no order logically or grammatically implied between steps 1 and 2. For example, an initial version of the software may be installed by disk on both computers in any order. *See* '490 Patent at 9:47-49 ("The electronic catalog software installation and support files are provided to a customer on ... diskettes."). Defendants argue that the second step must follow the first because the second step must "encompass making the revisions to the previously stored program-the same revisions that are transmitted to the remote computer in subsequent steps." Dkt. No. 183 at 57. The Court disagrees because Defendants mischaracterize step 2, which merely requires "maintaining the latest revisions of the program and a main program revision status." '490 Patent, claim 12. The Defendants further argue that "the 'maintaining' step refers to 'the program' identified in the first step-a further indication that they must be performed in order." Dkt. No. 183 at 57. However, the plain claim language indicates that the program "stored" at the remote computer is a different copy and may be a different version than the program "maintained" at the main computer. Thus, there is no logic indicating an order between steps 1 and 2.

Next, step 3 is "transmitting the remote program revision status from the remote computer to the main computer." '490 Patent, claim 12. Since there is no revision status on the remote computer until step 1, clearly step 3 must occur after step 1. In addition, step 2 must logically precede step three because step 2 requires maintaining the main program revision level at the main computer for the claimed purpose of

"comparing the remote program revision status to the main program revision status." The Court finds that logic suggests that the remote computer would not send its remote program revision to the main computer (as in step 3) unless there was already a main program revision at the main computer (as in step 2). Thus, the Court finds that step 3 must occur after both steps 1 and 2.

Step 4 calls for comparing the revision status of the remote computer with that of the main computer; thus, the comparison logically must happen after the transmission in step 3. Both parties agree. Dkt. No. 174 at 63 ("step 3 ... must occur before step 4"); Dkt. No. 184 at 58 ("the main computer cannot compare the remote revision status (step 4) until the remote computer has transmitted it (step 3)").

Finally, the Court agrees with Defendants that logic further dictates step 5 occurs after step 4. Step 5 calls for the actual program update, which is logical as well as a claimed result of the step 4 comparison: "updating portions of the program stored in the memory of the remote computer ***that are different*** from the program stored and maintained in the memory of the main computer ." '490 Patent, claim 12.

The Court construes that the steps of claim 12 must occur in the following order: steps 1 and 2 are interchangeable; steps 3 through 5 must occur in order and following both steps 1 and 2.

R. Order of Limitations in Claim 2 of the '649 Patent

The parties dispute the order of steps of the asserted method claim 2 of the ' 649 Patent (which depends from claim 1). Claims 1 and 2 are provided below with numbered annotations of steps.

1. A method for accessing product information data related to a selected product stored in a vendor's main computer from a customer's remote computer, the method comprising:

[**Step 1**] storing product data including graphics data and textual data related to a plurality of products in a memory of the main computer;

[**Step 2**] storing a first subset of product data including graphics data related to at least one of the plurality of products in a memory of the remote computer; selecting at least one product at the remote computer;

[**Step 3**] transmitting a data request query related to the at least one selected product from the remote computer to the main computer;

[**Step 4**] identifying a second subset of product data including graphics data and textual data related to the selected product from the product data stored in the memory of the main computer based on the data request query;

[**Step 5**] transmitting the textual data from second subset of product data from the main computer to the remote computer;

[**Step 6**] transmitting only updated graphics data from the second subset of product data that is different from the graphics data in the first subset of product data from the main computer to the remote computer;

[**Step 7**] storing the updated graphics data in the memory of the remote computer; and

[**Step 8**] combining the textual data from the second subset of product data received from the main computer with graphics data related to the selected product stored in the memory of the remote computer to provide complete product information data related to the selected product including both graphics and textual data.

2. The method of claim 1, further comprising [**Step 9**] displaying the complete product information data at the remote computer.

'649 Patent, claims 1-2.

(i) The Parties' Positions

Hill's primary position is that there is no need to construe the order this claim's steps, although Hill alternatively proposes that "the step of claim 2 cannot be completed until the 'combining' step of claim 1 is completed.' " JCCC at 10. Defendants propose that "the 'combining' step must be completed before the 'displaying' step is initiated." Id. The parties disagree regarding whether step 9 (displaying step) may begin before step 8 (combining step) is complete.

(ii) The Court's Construction

Earlier in this Order, with respect to the "Integrating," "Generating" and "Displaying terms, the Court discussed the same issue with respect to several claims, including claim 2 of the '649 Patent.FN39 Since the Court has declined to adopt Defendants' proposal, the Court reviews here Defendants' specific arguments with respect to claim 2 of the ' 649 Patent.

Defendants first note that the law provides for a mandatory order for method steps "when the method steps implicitly require that they be performed in the order written." Dkt. No. 183 at 51 (citing, Interactive Gift Express, Inc. v. CompuServe, Inc., 256 F.3d 1323, 1342-43 (Fed.Cir.2001)). Defendants follow this observation by arguing that Claim 2 implicitly requires the proposed order of steps. *Id*. at 52 ("Here, the claims do implicitly require that these steps be completed in order."). Defendants reason that "[c]laim 2 of the '649 Patent requires the displaying of the "complete product information" and this can only result from "completion of [step 8,] the last, 'combining,' step of claim 1." Id. The Court agrees with Defendants that step 9 requires "displaying the complete product information." '649 Patent, claim 2. However, as discussed above the claim, words do not grammatically or logically suggest that display may not begin using partially "combined" results. Thus, in order to display the "complete product information," the only logical restraint on step 8 (combining step) is that the " ***combining*** " must be ***complete*** before the " ***displaying*** " is ***complete.*** Defendants' proposal would require that the " ***combining*** " be ***complete*** before the " ***displaying*** " ***begins.*** The claim words do not logically or grammatically require that result. *See* Interactive Gift, 256 F.3d at 1343. ("First, we look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written.").

The Court finds that the integrating step need not be complete before the displaying step begins. **Thus, the Court declines to impose the order proposed by defendants and adopts Hill's contingent construction: "The step of claim 2 cannot be completed until the 'combining' step of claim 1 is completed.' "**

S. Order of Limitations in Claim 1 of the '142 Patent

The parties dispute the order of steps of the asserted method claim 1 of the ' 142 Patent. Claim 1 is provided

below with numbered annotations of steps.

1. A method for displaying product information data related to at least one product on a monitor coupled to a remote computer using variable data and constant data related to the at least one product stored and maintained in a memory of a main computer and using constant data related to the at least one product stored in a memory of the remote computer, the constant data being a subset of the product information data related to the at least one product, the method comprising:

[**Step 1**] transmitting a data request from the remote computer to the main computer;

[**Step 2**] transmitting the variable data and display information from the main computer to the remote computer, the display information indicating a format of the variable data and a display location of the constant data relative to the variable data;

[**step 3**] transmitting updated constant data from the main computer to the remote computer if the constant data stored in the memory of the remote computer is different from the constant data stored in the memory of the main computer;

[**Step 4**] storing the updated constant data in the memory of the remote computer;

[**Step 5**] integrating constant data stored in the memory of the remote computer with the variable data received from the main computer using the display information received from the main computer to format the constant data and the variable data to generate the product information data related to the at least one product; and

[**Step 6**] displaying the product information data generated by the remote computer during the integrating step on the monitor coupled to the remote computer.

'142 Patent, claim 1.

(i) The Parties' Positions

Hill proposes that "[[t]he" steps can be performed in any order, with the following exceptions: The step of 'transmitting variable data' (step 2) occurs before the step of integrating,' (step 5) which occurs before the step of 'displaying' (step 6); the step of 'transmitting updated constant data' (step 3) occurs prior to the step of 'storing the updated data' (step 4)." JCCC at 11. Defendants propose that "[s]tep 1 must be performed before step 2. Steps 2 and 3 are interchangeable but must be performed before step 4. Steps 4 through 6 must be performed in order. Step 5 must be completed before step 6 is initiated." Id. The parties disagree widely over the steps of this claim.

(ii) The Court's Construction

Defendants note that "Judge Ward construed the order of [the] '649 Patent claims, and the parties agree that this is the correct order of steps." Dkt. No. 183 at 59. Defendants further note that each of the '142 method steps at issue are analogous to the '649 claims that were evaluated by Judge Ward. *Id*. Thus, Defendants argue that the Court "should interpret claim 1 of the '142 Patent consistently with the '649 Patent claims and adopt Defendants' " proposal because it reflects Judge Ward's decision. Id.

The Court begins by evaluating steps 1 and 2. Step 1 requires "transmitting a data request from the remote computer to the main computer." '142 Patent, claim 1. Step 2 requires "transmitting the variable data and display information from the main computer to the remote computer." Defendants cite Judge Ward's Order and argue that

"[t]he first step of claim 1, 'transmitting a data request,' parallels the fourth step of claims 1 and 16 of the '649 Patent, 'transmitting a data request query.' In this step, the remote computer requests the data that is transmitted to and displayed by the remote computer in the subsequent steps. Accordingly, as in the '649 Patent claims, this step must be performed before any of the remaining steps of the claims.

Dkt. No. 183 at 59 (citation omitted).

This Court finds that, while the '142 steps do bear analogy to the '649 steps, there is a material difference with respect to the sequence of steps 1 and 2. In particular, the '649 step that is analogous to the instant '142 step 2, is expressly based upon the completion of the prior step. This is evident from Judge Ward's analysis:

Next, the claim requires the transmission of a data request query 'related to the at least one selected product....'. ... Thereafter, the claim requires "identifying a second subset of product data ... ***based on the data request query. 'This language requires the data request query to be used to identify the second subset of product data stored on the main computer and implies that this step occurs after the transmission of the query itself.***'

Amazon.com, 2005 WL 2483510, at *21.

Thus, Judge Ward found an express dependence between the claimed steps. Since step 2 of the '142 Patent has no similar express dependence upon step 1, Judge Ward's rationale is inapplicable here. Nevertheless, the Court finds that logic dictates step 1 occur prior to step 2 because, without step 1 (data request from the remote computer), the main computer would (i) not know where to send the step 2 transmission, or (ii) have any indication regarding what to send in the step 2 transmission. The Court recognizes that step 1 could technically be unrelated to the other steps of the claim, but the Court finds that such a conclusion would be outside the bounds of "logic" as dictated by the Federal Circuit.FN40 The same logic applies to step 3; thus, step 1 must occur before step 3.

The Court finds that steps 2 and 3 can occur in sequence unrelated to each other because there is no consequence to the order of transmission of variable data (step 2) and constant data (step 3). As the proposals indicate, the parties appear to have no controversy on this point.

The Court finds that constant data must be transmitted to the remote computer (step 3) before that constant data can be stored in the remote computer (step 4). Defendants propose that the variable data must be transmitted to the remote computer (step 2) prior to the storing of constant data on the remote computer (step 4). Defendants' support for this contention is once again an analogy to Judge Ward's Order. Dkt. No. 183 at 59 ("In construing the '649 claims, Judge Ward concluded that the steps of 'transmitting the [textual/variable] data' (step 6) and 'transmitting only updated [graphics/constant] data' (step 7) are interchangeable but must occur prior to the step of 'storing the updated [graphics/constant] data.' "). However, Judge Ward did not find that the transmission of variable (textual) data necessarily preceded storing constant (graphics) data: "Step 8 involves storing the updated graphics data in the memory of the remote computer. This must necessarily occur after the transmission of the updated graphics data." Amazon.

com, 2005 WL 2483510, at *21. Similarly, this Court finds that step 2 (transmitting textual data) needn't occur before step 4 (storing of constant data) because the two steps are grammatically and logically unrelated.

The Court finds that all of steps 1 through 4 must be complete before step 5 because the integrating action of step 5 involves all of (i) the transmitted variable data (step 2), (ii) the transmitted constant data (step 3) that is stored in the memory of the remote computer (step 4). Hill appears to disagree that steps 3 and 4 must occur before step 5. The Court disagrees with Hill because, as noted, step 5 "integrating" uses constant data that may include "updated constant data" transmitted and stored in steps 3 and 4 respectively.

The Court finds that display (step 6) must occur after integrating (step 5). The parties seem to agree. However, Defendants revisit an earlier issue by contending integrating (step 5) must be completed before display (step 6). JCCC at 11. As previously explained, the Court disagrees because display may be initiated using partially integrated results.

The Court construes that the sequence steps of claim 1 of the '142 Patent **are subject to the following rules: step 1 occurs before steps 2 or 3; step 2 occurs before step 5; step 3 occurs before step 4; step 4 occurs before step 5; and step 5 occurs before step 6, although step 6 may begin before step 5 is complete as long as step 5 completes before step 6 completes.**

T. Order of Limitations in Claim 17 of the '142 Patent

The parties dispute the order of steps of the asserted method claim 17 of the '142 Patent, which depends from claim 1. Claims 1 and 17 are provided below with numbered annotations.

1. A method for displaying product information data related to at least one product on a monitor coupled to a remote computer using variable data and constant data related to the at least one product stored and maintained in a memory of a main computer and using constant data related to the at least one product stored in a memory of the remote computer, the constant data being a subset of the product information data related to the at least one product, the method comprising:

[**Step 1**] transmitting a data request from the remote computer to the main computer;

[**Step 2**] transmitting the variable data and display information from the main computer to the remote computer, the display information indicating a format of the variable data and a display location of the constant data relative to the variable data;

[**Step 3**] transmitting updated constant data from the main computer to the remote computer if the constant data stored in the memory of the remote computer is different from the constant data stored in the memory of the main computer;

[**Step 4**] storing the updated constant data in the memory of the remote computer;

[**Step 5**] integrating constant data stored in the memory of the remote computer with the variable data received from the main computer using the display information received from the main computer to format the constant data and the variable data to generate the product information data related to the at least one product; and

[**Step 6**] displaying the product information data generated by the remote computer during the integrating step on the monitor coupled to the remote computer.

17. The method of claim 1, further comprising

[**Step 7**] storing and maintaining a main revision status in the memory of the main computer, the main revision status indicating the last time the constant data stored in the main computer was revised, and

[**Step 8**] storing a remote revision status in the memory of the remote computer, the remote revision status indicating the last time the constant data stored in the remote computer was revised.

(i) The Parties' Positions

Hill's primary position is that no construction is necessary, although Hill alternatively proposes the following construction: "[t]he steps of claim 17 can be performed in any order and can be performed in any order relative to the steps of claim 1." 'JCCC at 11. Defendants propose that "[t]he step of 'storing and maintaining a main revision status [step 7]' must be performed before the step of 'storing a remote revision status [step 8].' Both steps must be performed before the step of 'transmitting a data request [step 1].' Id. The parties primarily disagree regarding the existence of a logical or grammatical relationship between claim 1 limitations and claim 17 limitations.

(ii) The Court's Construction

Defendants support their request to limit the order of these method steps through analogy to the '490 Patent claims and prior Courts' rulings. In particular, Defendants assert that "the two steps of claim 17 are the same as the first two steps of claim 1 of the '490 Patent." Dkt. No. 183 at 61. Defendants further argue that "Judge McKinney and Judge Ward both ruled that these steps must be performed in order and before any of the remaining steps of the claim. *Id*. (citations omitted).

The Court disagrees with Defendants because the limitations of claim 1 of the '490 Patent have grammatical and logical dependencies as described above in this Court's analysis of that claim. The same or similar dependencies are missing in claims 1 and 17 of the '142 Patent. For example, while claim 17 is entirely concerned with "revision status," claim 1 of the '142 Patent does not require any activity with respect to any type of "revision status." '142 Patent, claims 1 and 17. Indeed, claim 1 does not even use the term "revision status." Id. In the '142 Patent, the entire issue of revision status enters in claim 17, which simply requires "storing and maintaining" respective revision status indications on each of the main and remote computers. Id. Neither claim 1 nor claim 17 even require the use of revision status.

The limitations of claim 17 require "storing and maintaining a [main/remote] revision status in the memory of the [main/remote] computer" where the revision status indicates "the last time the constant data stored in the [main/remote] computer was revised." Id. (emphasis added).FN41 Thus, each of the two limitations of claim 17 can occur anytime after there has been a revision to constant data on the applicable main/remote computer. Because steps 1 through 6 of claim 1 may be repeated multiple times before any application of steps 7 or 8 of claim 17, the latter steps have no logical dependency on steps 1 through 6.

The Court construes that the steps of claim 17 can be performed in any order and can be performed in any order relative to the steps of claim 1.

VI. CONCLUSION

The Court hereby **ORDERS** the claim terms addressed herein construed as indicated.

IT IS SO ORDERED.

FN1. All page numbers refer to the docket header page numbers.

FN2. The Federal Circuit has stated that it is the district court's duty to resolve the disputes regarding the scope of a claim term. *02* Micro International Ltd. v. Beyond Innovation Technology Co., Ltd., 521 F.3d 1351, 1362 (Fed.Cir.2008). However, "district courts are not (and should not be) required to construe every limitation present in a patent's asserted claims." *Id*. (citation omitted) When a "fundamental dispute" exists regarding the ***scope*** of a claim term-the metes and bounds encompassed by the claim language-the Court must construe the term. *Id*. (emphasis added) (citation omitted).

FN3. '490 Patent at 2:60-61 (emphasis added).

FN4. *Id*. at 9:18-19 (emphasis added).

FN5. *Id*. at 9:36-37 (emphasis added).

FN6. *Id*. at 9:42-43 (emphasis added).

FN7. *Id*. at 9:44-45 (emphasis added).

FN8. *Id*. at 20:37-39 (emphasis added).

FN9. "Although Hill contends that this term needs no construction, the defendants point to the specification and contend the term means 'displayable data in a. BID format.' The defendants reference an example in the specification under the description of a preferred embodiment-'490 patent col. 20, ll. 19-20. ('[t]he display files must be in one of two forms, either graphical [File]. BID) or textual ([File].TXT'). The court rejects this narrow construction of the term 'graphics data.' The court defines the term 'graphics data' as 'data *related to* computer-generated pictures produced on a screen. Graphics range from simple line or bar graphs to colorful and detailed images.' " Amazon, 2005 WL 2483510, at *4 (emphasis added).

FN10. *See* PCMAG.COM http://www.pcmag.com/encyclopedia _term/0,2542, t=ASCII+text+file & I=38016,00.asp (defining "ASCII file" as "[a] file that contains data made up of ASCII characters. It is

essentially raw text just like the words you are reading now. Each byte in the file contains one character that conforms to the standard ASCII code (see ASCII chart). Program source code, batch files, macros and scripts are straight text and stored as ASCII files. HTML and XML files are also ASCII files. Text editors such as Notepad create ASCII files as their native file format.").

FN11. "Again, Hill contends the term needs no construction. The defendants contend that this term means 'displayable data in a .TXT format.' The defendants rely on the same passage as in the previous term to arrive at this definition. The Court construes 'textual data' as 'data related to computer-generated words, letters, or numbers produced on a screen.' " Amazon, 2005 WL 2483510, at *4.

FN12. The Court also notes that Judge McKinney defined "main computer" as "a computer that has a memory in which variable data, constant data, and a main revision status indicating the revision level of the constant data is stored." *CompuServe III,* 2003 U.S. Dist. LEXIS 19218, at *22.

FN13. Judge Ward's Order does not speak to this issue because the parties' dispute regards an after-the-fact interpretation of that Order.

FN14. Defendants further note that a "web browser" would not meet the "requirements" of the patent. *Id*. However, this is an infringement issue and not a claim construction issue.

FN15. Judge McKinney defined a phrase that included the term "remote computer." In particular, Judge McKinney defined the following phrase, which he referred to as the "remote computer" element: "a remote computer including a remote memory for storing constant data and a remote revision status related to the at least one product, the constant data being a subset of information data related to at least one product, the remote revision status indicating the revision level of the constant data stored in the remote computer...." *CompuServe III,* 2003 U.S. Dist. LEXIS 19218, at *5-6. In analyzing this term, Judge McKinney determined that "the major difference between the two [parties'] proposed constructions is whether or not the main and remote computer elements require that the computer memory actually store the data referred to in the claim." *Id*. at *6. In answering this question, Judge McKinney held that the claim language requires "specific types of data be stored on the main and remote computers." Therefore, in providing a definition for the "remote computer" claim element, Judge McKinney reflected the storage requirement as follows: "the 'remote computer' phrase means: 'a computer that has a memory in which constant data and a remote revision status indicating the revision level of the constant data is stored.' " *Id*. This Court deviates from Judge McKinney's construction because the storage portion of the claim is not at issue in this case; rather, the dispute here is simply what a "remote computer" and "customer's remote computer" mean.

FN16. CompuServe II, 33 Fed. App'x. at 532.

FN17. *See supra* note 15.

FN18. Claims 9 and 12 are dependent claims of independent claim 1.

FN19. As Defendant's note, applicants later submitted another paper to the Examiner stating: "[i]f the constant data has been updated, vendor's computer automatically transmits only the revised portions of the constant data to customer's computer." Dkt. No. 183, Exh. B at 24.

FN20. In this respect, Defendants' application of claim differentiation seeks to make a claim without the "subset" limitation more narrow than a claim with the "subset" limitation.

FN21. The Federal Circuit has stated that it is the district court's duty to resolve the disputes regarding the scope of a claim term. *02* Micro Int'l Ltd. v. Beyond Innovation Tech Co., Ltd., 521 F.3d 1351, 1362 (Fed.Cir.2008). However, the Federal Circuit has also noted that "district courts are not (and should not be) required to construe *every* limitation present in a patent's asserted claims." *Id*. While the Court has provided reasoning and findings regarding the subject terms, the Court finds that the actual claim terms are easily discerned by the fact finder and provide better clarity than any proffered alternative.

FN22. In an attempt to submit such evidence, the Defendants quote the specification of the '490 Patent: " 'A combination of constant data residing on the customer's computer and variable data downloaded from vendor's computer is integrated or merged to create a completely updated data sheet for the selected product.' Col. 2, ll. 23-27; *see also* col. 3, ll. 11-15 ('The method includes the steps of storing and maintaining variable data and constant data related to a plurality of products in a memory of a main computer and storing constant data related to a plurality of products in a memory of a remote computer')." Id. at 30. However, the quoted excerpt discusses a "completely updated datasheet," not "all" (i.e. the global universe of) information that may exist about a product.

FN23. In their brief, Defendants suggest that their "construction does not preclude the *system* of the patent from adding a new product to a pre-existing catalog of product data." Dkt. No. 183 at 40, n.5. However, Defendants stated otherwise at the hearing: "And the issue here, as Mr. Carter mentioned, is whether updated constant data, the updated constant data, we are talking about the thing now as opposed to the action, whether it includes both modified data files, constant data files, and new data files, or just modified data files." Claim-Construction Hr'g Tr., Dkt. No. 198 at 71. *See supra* Part V.G.

FN24. *See* Gart v. Logitech, Inc., 254 F.3d 1334, 1342 (Fed.Cir.2001) ("We acknowledge that Gart made statements at column 2, lines 28-63 of the specification distinguishing the prior art, noting in particular that at least three of the references did not include the 'undercut curved areas.' However, Gart also notes in the specification that the 'prior art [that has attempted to provide specially shaped hand engaging surfaces] either [does] not provide the full ergonomic surface design of the present invention or [is] simply incompatible with the surface shapes needed in a hand controller as opposed to other hand-related applications.' *Id*. at col. 2, ll. 18-26."). *See supra* note 21.

FN25. Defendants also cite Medtronic Navigation, Inc. v. BrainLab AG, 222 Fed. App'x. 952 (Fed.Cir.2007) for the proposition that "a minimal dropping of an unenabled reference to an undeveloped system does not support a claim to it." Id. at 957. The Court finds this reference factually distinguishable. In *Medtronic,* the disputed term was "establishing a special relationship" and the specification described "acoustic" and "electromagnetic" techniques to establish such relationship. *Id*. The specification also mentioned that "[a]n optical system can be used as an alternative to the acoustic system described earlier." *Id*. The Federal Circuit upheld the District Court's claim interpretation that excluded an optical reference system. In doing so, the Federal Circuit cited a variety of evidence: (i) "[t]here is no enabling description of how to make and use an optical tracking system"; (ii) the case was "one in which ambiguity as to the scope of the claim language can be 'resolved in a manner that would preserve the patent's validity,' Phillips, 415 F.3d at 1327, that principle can properly be applied here"; and (iii) "the inventor himself stated, in answer to a series of questions regarding whether an optical tracking unit was available to him at the time of his invention of the acoustic system that ' [w]e weren't aware of any commercial optical tracking system that was available' and '[i]t seemed at the time that this would be an obvious development, that it would be coming in time.' " *Id*. Having no ambiguity in the present term, and no evidence regarding enablement or inventor testimony, the Court declines to adopt Defendants' inference from this case.

FN26. *See supra* note 21.

FN27. Defendants also cite Combined Sys., Inc. v. Def. Tech. Corp., 350 F.3d 1207, 1211-12 (Fed.Cir.2003), which stated: "where method claim for forming a shotgun projectile included the steps of 'forming folds' and 'inserting said formed folds' into an opening, the claim 'plainly as a matter of grammar ... in the absence of compelling evidence to the contrary' required that the forming step happen before the insertion step." However, in the instant case the Court has found no logical or grammatical dependence while the *Combined Sys*. case involved the clear logical and grammatical necessity of having "formed folds" before "said formed folds" could be inserted into an opening. Thus, *Combined Sys*. is not controlling.

FN28. *See supra* note 21.

FN29. Claims 2 and 3 of the '649 Patent depend from claim 1, which is where the term originates.

FN30. Claim 18 of the '649 Patent depends from claim 16, which is where the term originates.

FN31. Claim 9 of the '490 Patent depends from independent claim 1.

FN32. Claim 3 of the '649 Patent depends from independent claim 1 and claim 18 depends from independent claim 16.

FN33. '490 Patent at 2:17-20.

FN34. '490 Patent at 3:39-42.

FN35. '490 Patent at 20:9-12.

FN36. '490 Patent at 20:15-19.

FN37. *See supra* note 21.

FN38. Throughout this Order, the Court intends that method steps may be performed simultaneously unless the Court specifically finds an order between steps necessary.

FN39. *See supra* Part V.L.

FN40. *See* discussion *supra* Part V.L.

FN41. The Court notes that the '490 Patent requires a revision status that indicates "a revision level" and does not necessarily indicate "the last time the constant data" was revised.