

United States District Court,
N.D. Georgia, Atlanta Division.

McKESSON INFORMATION SOLUTIONS LLC,
Plaintiff.

v.

EPIC SYSTEMS CORPORATION,
Defendant.

Civil Case No. 1:06-CV-2965-JTC

Aug. 29, 2008.

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John C. Alemanni, Kilpatrick Stockton, Winston-Salem, NC, William Henry Boice, David C. Holloway, Jason Delmon Gardner, Steven D. Moore, Kilpatrick Stockton, Atlanta, GA, for Defendant.

ORDER

JACK T. CAMP, District Judge.

This matter is currently before the Court for construction of the disputed terms in U.S. Patent No. 6,757,898. After reviewing the parties' briefs and holding a claim construction hearing, the Court construes the disputed terms as follows.

I. Background

The technology at issue in this patent infringement action involves a method for a health-care provider and a patient to communicate automatically and electronically with each other over the internet. The patent-in-suit is U.S. Patent No. 6,757,898 ("the '898 patent"), owned by Plaintiff McKesson Information Solutions LLC. The allegedly infringing product is MyChart, a health-care information software product sold by Defendant Epic Systems Corporation.

The '898 patent contains eighteen claims. Claim 1 of the '898 patent is an independent claim, which recites "[a] method of automatically and electronically communicating between at least one health-care provider and a plurality of users serviced by the health-care provider ..." '898 patent, col. 44, ll. 60-62. The remaining claims of the '898 patent are dependent upon claim 1. '898 patent, col. 45-46. The parties dispute the constructions of ten distinct claim phrases, found in claims 1, 2, and 14.

II. Claim Construction Standard

Claim construction is a question of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). "[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed.Cir.2004)). Generally, the words of a claim are given their ordinary and customary meaning, which "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention" *Id.* at 1312-13 (citations omitted).

Occasionally, the meaning of a claim term "may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* at 1314. In most instances, however, the Court must go further than the readily understood meaning, and the Court may consult various sources to aid in determining the meaning of the disputed claim language. *Id.* These sources include: (1) "the words of the claims themselves," (2) "the remainder of the specification," (3) "the prosecution history," and (4) "extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.* (quoting *Innova*, 381 F.3d at 1116). "The sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law." *Id.* at 1324.

First, "the claims themselves provide substantial guidance as to the meaning of particular claim terms." *Id.* Both "the context in which a term is used in the asserted claim" and the "[o]ther claims of the patent in question" are useful for understanding the ordinary meaning. *Id.*

In addition, "the specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptoronic*, 90 F.3d 1576, 1582 (Fed.Cir.1996)). In short, the claims "must be read in view of the specification, of which they are a part." *Markman*, 52 F.3d at 979. Thus, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Phillips*, 415 F.3d at 1316 (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed.Cir.1998)). One way the specification can assist the Court in claim construction is by "reveal[ing] a special definition given to a claim term ... that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Id.* (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed.Cir.2002)). The specification may also "reveal an intentional disclaimer, or disavowal, of claim scope by the inventor.... In that instance as well, ... the inventor's intention, as expressed in the specification, is regarded as dispositive." *Id.* (citing *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed.Cir.2001)). However, "absent a clear disavowal or contrary definition in the specification," the patentee may claim the invention broadly and is entitled to "enforcement of the full scope of that language." *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1357 (Fed.Cir.2004) (citation omitted). Reference in the specification to a preferred embodiment alone does not limit the broad claim language. *Id.*

The Court may also consider the patent's prosecution history. *Id.* at 1317. "Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Phillips*, 415 F.3d at 1317 (citing *Lemelson v. Gen. Mills, Inc.*, 968 F.2d 1202, 1206 (Fed.Cir.1992)). However, the prosecution history "represents an ongoing negotiation between the PTO and the applicant, rather than the

final product of that negotiation" *Id.* For that reason, the prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* In addition, just like specification definitions and disclaimers, prosecution disclaimers must be clear and unambiguous. *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374 (Fed.Cir.2008). A patentee must make a "clear and unmistakable disavowal of scope during prosecution" in order to limit the meaning of a claim term. *Id.* (quoting *Purdue Pharma L.P. v. Endo Pharms., Inc.*, 438 F.3d 1123, 1136 (Fed.Cir.2006)).

Finally, the Court may also rely on extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317 (quoting *Markman*, 52 F.3d at 980.) For example, because they "endeavor to collect the accepted meanings of terms used in various fields of science and technology," "dictionaries, and especially technical dictionaries, ... have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology" *Id.* at 1318 (citing *Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed.Cir.2002)). However, for many reasons, external evidence is generally less reliable than the intrinsic record. *Id.* For instance, "extrinsic evidence by definition is not part of the patent and does not have the specification's virtue of being created at the time of patent prosecution for explaining the patent's scope and meaning." *Id.* In addition, "extrinsic evidence consisting of expert reports and testimony is generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence." *Id.*; *see also id.* at 1318-19.

III. Discussion

The parties have identified ten claim phrases for construction. The Court addresses the phrases according to the claims in which they are found.

A. *Claim 1 of the '898 Patent*

Claim 1 of the '898 Patent reads (with the disputed phrases in bold):

A method of **automatically and electronically communicating** between at least one **health-care provider** and a **plurality of users** serviced by the health-care provider, said method comprising of the steps of:

initiating a communication by one of the plurality of users to the provider for information, wherein the provider has established a preexisting medical record for each user;

enabling communication by transporting the communication through a **provider/patient interface** over an electronic communication network to a Web site which is unique to the provider, whereupon the communication is automatically reformatted and processed or stored on a central server, said Web site supported by or in communication with the central server through a **provider-patient interface service center**;

electronically comparing content of the communication with **mapped content**, which has been previously provided by the provider to the central server, to formulate a response as a static or dynamic object, or a combined static and dynamic object; and

returning the response to the communication automatically to the user's computer, whereupon the response is read by the user or stored on the user's computers

said provider/patient interface providing a fully automated mechanism for generating a personalized page or area within the provider's Web site for each user serviced by the provider; and

said patient-provider interface service center for **dynamically assembling and delivering custom content to said user.**

'898 Patent, col. 44, ll. 60-col 45, ll. 24.

1. Preamble Phrases

The parties dispute the construction of three phrases contained in the preamble of claim 1:(1) "automatically and electronically communicating;" (2) "health-care provider;" and (3) "plurality of users." Epic argues that none of these phrases should be construed because the preamble is not a substantive claim limitation. McKesson disagrees, and argues that the preamble should be construed because it "provides an antecedent basis" for several other terms and it "states the framework of the invention."

"If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim." *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1246 (Fed.Cir.2008) (quoting *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed.Cir.1999)). However, the preamble need not be construed when "a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention." *Symantec Corp. v. Computer Assocs. Int'l, Inc.*, 522 F.3d 1279, 1288 (Fed.Cir.2008) (citation omitted).

The United States Court of Appeals for the Federal Circuit has identified several "guideposts" to aid courts in determining whether a preamble should be given limiting weight. *See Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed.Cir.2002). Those "guideposts" include: (1) "dependence on a particular disputed preamble phrase for antecedent basis [;]" (2) whether "the preamble is essential to understand limitations or terms in the claim body[;]" (3) whether the preamble "recit[es] additional structure or steps underscored as important by the specification[;]" (4) whether the patentee showed "clear reliance on the preamble during prosecution to distinguish the claimed invention from prior art[;]" (5) whether "deletion of the preamble phrase does not affect the structure or steps of the claimed invention[;]" and (6) whether the preamble merely describes the "use or purpose" of the invention. *Id.* at 808-809.

The phrase "automatically and electronically communicating" does not limit the method described in claim 1. This phrase could be removed from the preamble, and the structure and meaning of the claimed method would not change. The terms "electronically" and "automatically" are further defined in the body of claim 1, and their use in the preamble is not essential to understand the limitation of those terms in the claim body. Therefore, the Court need not construe the preamble phrase "automatically and electronically communicating."

However, unlike the phrase "automatically and electronically communicating," the terms "health-care provider" and "plurality of users" appear repeatedly throughout the claim, and the construction of these claims is central to the scope of the patented method. Thus, those terms must be construed by the Court.

The parties propose the following constructions for the phrase "health-care provider":

"health-care provider"

McKesson's Proposed Construction	Epic's Proposed Construction
"an individual, entity, group of individuals, group of entities, or combination thereof that provides healthcare services"	"an individual, entity, group of individuals, group of entities, or combination thereof that provide healthcare or similar services"

As indicated by the parties proposed constructions, the only issue is whether the Court should include the words "or similar" in its construction.

Epic argues that the specification broadly defines the term "provider." The specification states that "[t]he terms 'doctor,' 'physician,' 'health-care provider,' and 'practitioner' are used interchangeably with the term 'provider.'" '898 Patent, col. 14, l. 66-col. 15, l. 23. The specification goes on to state that "[t]he term 'provider' could refer not only to medical doctors, but also to dentists, opticians, physical therapists and the like" and it "could also be extended to alternative medical practices, such as chiropractors, herbalists, acupuncturists, aroma therapists, and the like." Id. col. 15, ll. 14-19. "[I]t could eventually include veterinary practices, schools, case managers and the like." Id. col. 15, ll. 19-21.

However, the claim language itself specifically states that the provider using the claimed invention is a "health-care provider." Thus, although the specification contemplates that the invention *could be used* in "similar" industries, the invention contained in the claim is not so broadly defined. Therefore, the Court will not include the words "or similar" in the construction of "health-care provider."

In addition, the parties propose the following constructions for the phrase "plurality of users":

"plurality of users"

McKesson's Proposed Construction	Epic's Proposed Construction
"two or more users, a user being a patient, a parent, a guardian or other patient representative"	"two or more users, a user being a patient, a parent, a guardian or other patient representative, a client or a consumer"

Similar to the dispute over "health-care provider," the only issue with respect to the phrase "plurality of users" is whether the Court should include the words "a client or a consumer" in its construction.

Epic argues that, just like the term "provider," the specification gives the term "user" a broad definition. The specification states that "[t]he term 'patient' is used interchangeably with 'user,' 'client,' or 'consumer' and refers to the authorized individual receiving the service or information, and operating the client computer." '898 Patent, col. 15, ll. 24-26 (emphasis added).

However, Epic's construction of user appears to flow from its broad definition of provider. Epic wishes to adopt a broader definition of user to include clients and consumers of the "similar services" it proposed in connection with the term provider. However, the claimed invention does not involve similar services-such as accountants or retail business-and the users of those similar services-who would be clients and consumers. Rather, as claimed, the invention involves health-care services and the users of health-care services-who are patients. Because the Court narrowly construed providers and rejected Epic's "similar services" language, including "clients and consumers" would improperly broaden the construction of users. Therefore, the Court adopts McKesson's proposed construction and does not construe users to include "a

client or consumer."

2. *provider/patient interface*

In the second step of the method recited in claim 1, the user's communication is transported to the provider's unique website through a "provider/patient interface." '898 patent, col. 45, ll. 1-8. The parties propose the following constructions for the phrase "provider/patient interface":

"provider/patient interface"	
McKesson's Proposed Construction	Epic's Proposed Construction
"software for a personalized web page or area within the provider's Web site by which the health-care provider and the patient can exchange inquiries, responses, data, services and information"	"one or more web pages or other computer displays that permit a user to initiate a communication to or access information from a healthcare provider"

When read in context of the claim language surrounding it, "provider/patient interface" refers to the component of the invention which "enables communication" by "transporting the [user's] communication" to the "Web site which is unique to the provider." '898 patent, col. 45, ll. 1-8. According to their proposed constructions, the parties agree that this component takes the form of a web page. Thus, in its simplest and broadest construction, the "provider/patient interface" is a web page that permits the provider and the user to communicate. The parties' primary dispute concerns what information the interface allows the provider and the user to exchange with one another.

McKesson argues that the automatic function of "exchanging inquiries, responses, data, services and information" was the basis for the patentability of the '898 patent, and, therefore, should be included in the construction of provider/patient interface. The "Field of the Invention" states that the invention provides a "reliable and effective interface for rapidly exchanging *inquiries, responses, data, services and information* ..." '898 patent, col. 1, ll. 5-12 (emphasis added). The specification then repeatedly refers to the patient and the user exchanging inquiries, requests, responses, and certain categories of information, such as appointment requests, prescription refills, online triage, and health search information. *See, e.g.*, '898 patent, col. 4, ll. 53-56; col. 4, ll. 65-67; col. 10, ll. 6-8; col. 21, ll. 50-53. Thus, the basic invention was to allow the user and the provider to exchange "inquiries, responses, data, services and information."

Epic's construction, on the other hand, states that the interface allows the provider and the user to exchange "information." This construction is overly broad, it is not specific to the patented invention, and it is unsupported by the intrinsic evidence. Allowing the provider and the user to exchange "information" could include many things outside the scope of the patent, such as checking the weather or stocks online. Therefore, the Court agrees with McKesson that the information being exchanged between the provider and user is "inquiries, responses, data, services, and information."

In addition, McKesson's proposed construction emphasizes that the invention creates a personalized web page for each user, which is the entire purpose of the invention as stated in the specification and the claims. Therefore, the Court adopts McKesson's construction of "provider/patient interface," because it reflects the purpose of the interface as described in the specification.

3. *provider-patient interface service center*

Claim 1 then states that the provider's unique website is "supported by or in communication with the central server through a provider-patient interface service center." '898 patent, col. 45, ll. 6-8. The parties propose the following constructions for the phrase "provider-patient interface service center":

"provider-patient interface service center"	
McKesson's Proposed Construction	Epic's Proposed Construction
"software that obtains content from the provider's database(s) and/or other sources, and then dynamically assembles and delivers the content to the patient's personalized web page"	"computer software that provides information from the central server for the provider-patient interface"

Claim 1 states that the "provider-patient interface service center" allows the provider's unique website to communicate with the central server. *See* '898 patent, col. 45, ll. 6-8 ("enabling communication by transporting the communication through a provider/patient interface over an electronic communication network to a Web site which is unique to the provider ... *said Web site supported by or in communication with the central server through a provider-patient interface service center.*") (emphasis added). The parties agree that the service center is "software." Thus, broadly defined, the provider-patient interface service center is software that links the central server to the provider's unique website.

McKesson argues that the phrase should be construed to require that the service center dynamically assemble and deliver content to the patient's personalized web page. The specification states that "[t]he preferred method of the present invention comprises a provider-patient interface Service Center, wherein custom content is dynamically assembled and delivered." '898 patent, col. 7, ll. 33-35. In addition, the last phrase of claim 1 states that "said patient-provider interface service center for dynamically assembling and delivering custom content to said user." This claim language was one of the primary reasons the Examiner allowed claim 1, and, therefore, it is central to the patented invention. *See infra* Sections III.A.5-6.

Epic's proposed construction, on the other hand, is overly broad and not specific to the patented invention. Epic admits that one of the central purposes of the service center is to dynamically assemble and deliver content to the user, but Epic merely argues that adding such language would render other claim language redundant. (Def.'s Resp. Claim Constr. Br. at 23-25.) To the contrary, including this language will assist in understanding exactly *where* the content is dynamically assembled and delivered. *See* '898 patent, col. 6, ll. 21-24 ("The preferred communication system of the present invention comprises a provider-patient interface Service Center, *wherein custom content is dynamically assembled and delivered.*") (emphasis added). Therefore, the Court will include this language in its construction.

McKesson also argues that the specification requires the service center to obtain content from "the provider's database(s) and/or other sources," rather than the central server. McKesson merely points to several figures in the patent which show the ePPI service center collecting data "from various sources," and show the service center as being made up of "a Web server; a database server; a modular collection and storage program; and an electronic mailing capability." '898 patent, col. 8, ll. 58-63; col. 9, ll. 5-8. Neither of these diagrams, however, clearly require that the service center collect information from "databases and/or other sources." To the contrary, the unambiguous claim language states that the service center connects the website with the "central server."

Therefore, the Court construes "provider-patient interface service center" to mean "software that links the central server to the provider's unique website by obtaining content from the central server and dynamically assembling and delivering that content to the website." This construction adopts the concept that the service

center links the central server with the provider's website and it emphasizes the dynamic nature of the service center.

4. mapped content

The third step of the method in claim 1 requires the user's communication to be electronically compared to "mapped content." The parties propose the following constructions for the phrase "mapped content":

"mapped content"	
McKesson's Proposed Construction	Epic's Proposed Construction
"information in a database which is relevant based on being logically associated with the patient and the content of the patient's communication"	"information associated with other information"

As indicated by their proposed constructions, the parties agree that "mapped content" refers to "the association of information." However, the Court must determine what information is being associated.

The phrase "mapped content" is found in the third step of the method set forth in claim 1. After the user initiates a communication (step 1) and that communication is carried over the provider/patient interface (step 2), the third step requires "electronically comparing content of the communication with *mapped content*, which has been previously provided by the provider to the central server, to formulate a response ..." '898 patent, col. 45, ll. 9-12. Thus, in the context of the claim itself, "mapped content" refers to the information previously provided by the provider to the central server that is associated with the user who initiated the communication.

McKesson proposes that the Court construe the information being associated to mean "information in a database." However, McKesson fails to point to a clear disclaimer in the specification which requires the information to come from "a database." The Court should rely on the context of the claim itself, which states that the information was provided "to the central server." Therefore, the Court construes "mapped content" to mean "information previously provided by the provider to the central server that is logically associated with the user who initiated the communication."

5. said provider/patient interface providing a fully automated mechanism for generating a personalized page or area

The method in claim 1 concludes with two limitations. The first limitation states "said provider/patient interface providing a fully automated mechanism for generating a personalized page or area." McKesson added the two limitations during prosecution to overcome certain prior art, and the Examiner cited the two limitations as the basis for allowing the claims over U.S. Patent 6,270,456 ("Iloff '456").

Early in the prosecution of the '898 patent, the Examiner rejected all but two of McKesson's proposed claims as anticipated or obvious by Iliff '456. Iliff '456 "relates to computerized medical diagnostic systems" and is "directed to a computerized system for time-based diagnosis of a patient's complaint by use of dynamic data structures." Iliff '456 allows a user to complete a diagnostic questionnaire over the internet, after which the program tells the user what conditions the user might have. Iliff '456 does not provide for any "personalized pages or areas" and it uses a scripted web page. Thus, according to McKesson, the primary distinction between Iliff '456 and the '898 patent is the automatic creation of personalized web pages provided for in

the '898 patent.

McKesson initially tried to distinguish its claims from Iliff '456, but the Examiner rejected McKesson's argument and issued a Final Rejection on July 11, 2002. On September 18, 2002, McKesson tried to amend the independent claim to distinguish it from Iliff '456, but the Examiner maintained its Final Rejection. After several more amendments and arguments failed, on November 12, 2003, McKesson amended the independent claim in the application so that it concluded with the following limitations:

said provider/patient interface providing a fully automated mechanism for generating a personalized page or area within the provider's Web site for each user serviced by the provider; and

said patient-provider interface service center for dynamically assembling and delivering custom content to said user.

As a result of McKesson's amendments, on December 1, 2003, the Examiner allowed the claims. The Examiner provided the following "statement of reasons for allowance:"

The limitation of providing a fully automated mechanism for generating a personalized page or area within the provider's Web site for each user serviced by the provider is deemed to be a nonobvious improvement over the invention patented in [Iliff '456].

Thus, the addition of this limitation served to "make the claim scope narrower than it otherwise would be." *See Phillips*, 415 F.3d at 1317. However, because McKesson amended its claim to include these express limitations, the Court need not construe claim 1 in order to add the limitations. *Contra CIAS, Inc. v. Alliance Gaming Corp.*, 504 F.3d 1356 (Fed.Cir.2007).

Nevertheless, the Court must construe the meaning of the terms in the phrases in dispute. The parties propose the following constructions for "said provider/patient interface providing a fully automated mechanism for generating a personalized page or area":

"said provider/patient interface providing a fully automated mechanism for generating a personalized page or area"	
McKesson's Proposed Construction	Epic's Proposed Construction
"the software delivers custom content to the patient's personalized web page or area within the provider's Web site by which the health-care provider and the patient can exchange inquiries, responses, data, services and information, based on logical application of the practice's or other provider's custom mappings wherein the web page is created using data previously entered into a database of the provider"	if construed at all, "provider/patient interface" should be construed as above and the remainder of the phrase means "initiating the construction of a page or area within a provider's web site that contains information related to the user without the need for manually constructing the page or area"

The claim language itself, combined with the distinctions from Iliff '456, suggest that the provider/patient interface provides a mechanism by which the user's personalized web page or area is automatically generated without the need for the user or provider to manually construct the web page or area.

McKesson's proposed construction adds numerous limitations found elsewhere in the claim. For example,

McKesson includes the phrase "by which the health-care provider and the patient can exchange inquiries, responses, data, services and information" in its proposed construction. However, it is not necessary to include this language, because the phrase at issue merely explains the result of the provider/patient interface (automatically generating a personalized web page) rather than the function of the provider/patient interface (allowing the user and provider to communicate and exchange information).

Similarly, McKesson seeks to add the phrases "delivers custom content to the patient's personalized web page" and "based on logical application of the practice's or other provider's custom mappings wherein the web page is created using data previously entered into a database of the provider." These phrases do not explain the automatic nature of the provider/patient interface, and they fail to do anything more than repeat limitations found elsewhere in the claim. *See* '898 patent, col. 45, ll. 22-24 (providing custom content); col. 45, ll. 9-13 (comparing content of the communication with mapped content previously provided by the provider). Thus, McKesson's construction does not emphasize the automatic nature by which the personalized pages are constructed, which was the basis of the Examiner's allowance and the reason for including the phrase at issue, and McKesson's construction would render later claim language redundant.

The Court construes "said provider/patient interface providing a fully automated mechanism for generating a personalized page or area" to mean "the provider/patient interface provides a mechanism by which the user's personalized web page or area is automatically generated without the need for the user or provider to manually construct the web page or area." This construction is faithful to the invention, recognizing the process of automatically creating personalized web pages, which is the primary distinction between the '898 patent and Iliff '456, and it excludes much of the redundant, unnecessary language proposed by the parties.

6. dynamically assembling and delivering custom content to said user

Claim 1 concludes by stating "said patient-provider interface service center for dynamically assembling and delivering custom content to said user." This was the other limitation added to the end of claim 1 which resulted in the Examiner allowing the '898 patent. As noted, however, because the patentee included this express language in the claim itself, the Court need not construe claim 1 to include this limitation. *See supra* Section III.A.5. Nevertheless, the Court must determine the meaning of the disputed terms in the phrase. The parties propose the following constructions for the phrase "dynamically assembling and delivering custom content to said user":

"dynamically assembling and delivering custom content to said user"	
McKesson's Proposed Construction	Epic's Proposed Construction
"the service center collects and presents to the patient articles and/or instructions from a database which is logically associated with the patient and the content of the patient's communication in response to receipt of a patient's communication"	"in response to the user's communication, constructing a web page that contains information that is tailored or individualized to the user, and transmitting that web page to the user"

The parties' proposed constructions both suggest that "dynamically assembling and delivering custom content to said user" involves collecting custom content and delivering that content to the user in response to the user's communication. The parties disagree, however, as to how to define "custom content"-as acknowledged by both parties at the claim construction hearing.

McKesson defines "custom content" as "articles and/or instructions from a database which is logically

associated with the patient and the content of the patient's communication." To support their argument that the custom content must include "articles and/or instructions," McKesson relies on several phrases in the specification. These phrases, however, refer to articles and instructions as the "preferred ePPI platform" or explain representative scenarios. *See* '898 patent, col. 12, ll. 9-21; col 14, ll. 43-49 and 56-59.

Epic, as usual, adopts a broader definition, construing "custom content" to mean "information that is tailored or individualized to the user." Epic admits that custom content *may* include articles and instructions, but argues that it is not *limited* to *only* articles and instructions. Epic points out the McKesson's own infringement contentions do not support their proposed construction. McKesson's infringement contentions state that "the custom content includes lab results, visit summaries, discharge instructions, allergy and medication lists, immunizations, demographics ... online appointment scheduling ... secure messaging ... [and] patient-specific clinical front page [.]" (*See, e.g.*, Pl.'s Infringement Contentions at 10.)

In giving background, the specification describes how certain protocols now give individuals greater access to the internet and create the ability to access other web pages or internet facilities. This also resulted in much of the information on the internet not coming from trusted sources. Since patients still consider their personal physician a very reliable source, one of the basic purposes of the invention is to provide information to patients from a reliable source. However, nowhere does the specification clearly and unambiguously state that the "custom content" must include articles and instructions. As a result, although McKesson is correct that the "custom content" must be associated with the user and it *may* include articles or instructions, the specification does not require that "custom content" *must* include only "articles and/or instructions." Therefore, the Court construes "dynamically assembling and delivering custom content to said user" to mean "collecting information, such as articles or instructions, that is logically associated with the user or the content of the user's communication and automatically delivering that information to the user in response to the user's communication."

B. Claim 2 of the '898 Patent

Claim 2 of the '898 Patent reads (with the disputed terms in bold):

The method of claim 1, wherein the method is implemented by an **electronic provider-patient interface system (the "ePPI System")**.

'898 Patent, col. 45, ll. 25-27. The parties propose the following constructions for the phrase "electronic provider-patient interface system (the "ePPI System")":

"electronic provider-patient interface system (the "ePPI System")"	
McKesson's Proposed Construction	Epic's Proposed Construction
"the method is implemented by a service center utilizing a set of one or more server computers, including: a Web server capable of responding to HTTP requests from patients by sending HTML formatted documents to those patients; a database server capable of maintaining complex relationships between practices, patients, doctors, and healthcare information content; a modular data collection program that receives information from doctors' or practitioners' scheduling and billing systems regarding patient visits, in a variety of different data and file formats, reformats the information, and stores it in the database; and an electronic mailing capability which supports the	"a system in which one or more web pages or other computer displays permit a user to electronically

automated transmission of notifications to patients when new information is added to the database, as well as the transmission of notifications to practice-designated personnel whenever new requests from patients are made (e.g., appointment scheduling requests, prescription renewal requests, non-urgent questions for a doctor, etc.), to provide the functional output as depicted in Figure 3 of the '898 Patent."

initiate a communication to or access information from a healthcare provider"

The ePPi system is the preferred embodiment of the communication system of the invention set forth in the '898 patent. '898 patent, col. 4, ll. 18-20; col. 7, ll. 14-16. Claims must be "construed *in light of* the specification, and are not limited to a designated 'preferred embodiment' unless the embodiment is in fact the entire invention presented by the patentee." *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1320 (Fed.Cir.2004) (quoting *Vulcan Eng'g Co., Inc. v. Fata Aluminum, Inc.*, 278 F.3d 1366, 1376 (Fed.Cir.2002)) (emphasis added). However, the limitations from a preferred embodiment may be incorporated into the claims themselves when "one of ordinary skill would regard the [] preferred embodiments as the entire invention." *Id.*

Claim 2 states that the steps of the method set forth in claim 1 are implemented using the ePPi system. Claim 2 does not set forth any further limitations on the method set forth in claim 1. Thus, a person of ordinary skill in the art would regard the ePPi system as the entire invention set forth in claim 2, and the limitations of the ePPi system as set forth in the specification may be incorporated into the Court's construction of claim 2.

The specification states that the ePPi system "embodies a set of one or more server computers, which perform various tasks" and which "comprise a logical unit, working in concert to provide the ePPi functionality." '898 patent, col. 5, ll. 18-23. The specification then sets forth the four "functional components" of the ePPi system. '898 patent, col. 5., ll. 25-43. *See also* '898 patent, col. 8, ll. 58-63; col. 20, ll.19-47. Therefore, the Court construes "electronic provider-patient interface system (the "ePPi System")" to mean:

one or more server computers performing various tasks and working in concert, which are made up of the following functional components:

- (1) a Web server capable of responding to HTTP requests from users by sending HTML formatted documents;
- (2) a database server capable of maintaining complex relationships between practices, patients, doctors, and healthcare informational content;
- (3) a modular data collection program that receives information from providers' scheduling and billing systems, reformats the information, and stores it in the database; and
- (4) an electronic mailing capability which supports the automated transmission of notifications to patients as well as the transmission of notifications to practice-designated personnel.

This construction incorporates the four "functional components" of the ePPi System as set forth in the specification. *See* '898 patent, col. 5., ll. 25-43; col. 8, ll. 58-63; col. 20, ll.19-47.

C. Claim 14 of the '898 Patent

Claim 14 of the '898 Patent reads (with the disputed terms in bold):

The method of claim 12, wherein the selection is based upon **logical mappings that reside in a database server capable of maintaining complex relationships**.

'898 patent, col. 46, ll. 27-29. Claim 14 is dependent upon claim 12, which states:

The method of claim 1, wherein the custom content is selected from a library of information, and wherein the selection is based upon specific data received from the provider about each user served by the provider.

'898 patent, col. 46, ll. 20-23. The parties propose the following constructions for the phrase "logical mappings that reside in a database server capable of maintaining complex relationships":

"logical mappings that reside in a database server capable of maintaining complex relationships"	
McKesson's Proposed Construction	Epic's Proposed Construction
"the custom content is selected based on the operation of a fully relational database program, such as Oracle or Microsoft Corporation's SQL Server that maintains information about the practices, the patients and the content in the form of related tables and can support the complex data relationships for personalization of content to each patient based on their encounters with his/her doctor. A relational database can be viewed in many different ways and spread across several tables, as opposed to a flat-file database, which is selfcontained in a single table"	"logical associations that are stored in one or more computers that are capable of relating multiple pieces of data to each other"

When read in context, claim 14 states that the custom content-which is sent to the user in the last step of the method in claim 1-is selected based upon logical mappings which are located in database servers that are capable of maintaining complex relationships. Although the patent does not expressly define "logical mappings," the Court previously determined that the phrase "mapped content" referred to the association of certain types of information based upon being logically relevant to a particular user. *See supra* Section III.A.4. It follows, then, that logical mappings must refer to the logical associations which are used to relate different sets of information together in order to determine what information is relevant to a particular user.

The primary dispute between the parties is how to construe "a database server capable of maintaining complex relationships." McKesson argues that this phrase means a "relational database" that maintains information in the form of related tables and can be viewed in many different ways and spread across several tables. McKesson's proposed construction explicitly excludes flat-file databases.

Epic, on the other hand, argues that the claim language itself does not differentiate among any specific type of database servers, and, therefore, the claim is not limited to relational databases and does not expressly exclude flat-file databases. Epic argues that there are several types of database serves that can maintain complex relationships other than relational databases. Therefore, according to Epic, it would be improper to limit this claim to only relational databases, and any database server that can maintain complex relationships satisfies the claim.

The specification twice provides in the "Summary of the Invention" that "the custom content selection in the preferred communications system is based upon logical mappings that reside in the relational database server." '898 patent, col. 6, ll. 32-34; col. 7, ll. 43-45. McKesson also points to the "Description of the Invention," where the specification states:

Central to the ePPi architecture is a relational database ... that maintains information about the practices, the patients and the content in the form of related tables. Relational databases are powerful because they require few assumptions about how data is related or how it will be extracted from the database. As a result, the same database can be viewed in many different ways and spread across several tables, as opposed to a flat-file database, which is self-contained in a single table.

* * *

In addition, by using a powerful relationship database engine, computation and processing of the personalized rules can be "pushed" closer to the data itself ... which reduces processing time, increases performance, and results in greater scalability.

'898 patent, col. 16, l. 65-col. 17, l. 24.

These phrases clearly indicate that the patentees preferred to use relational databases when implementing the preferred ePPi embodiment, and that the use of relational databases in the ePPi embodiment results in greater performance and efficiency. These phrases, however, merely state that relational databases are central to the preferred ePPi System, not the claimed invention as a whole. The specification explicitly states that "the present invention is not intended to be limited to the embodiments shown, but is to be accorded the widest scope consistent with the principles and features disclosed herein." '898 patent, col. 10, ll. 54-57. *See also* '898 patent, col. 44, ll. 49-58.

In addition, McKesson does not contend that the only database servers capable of maintaining complex relationships are relational databases. Had McKesson wanted to limit claim 14 solely to the relational database embodiment disclosed in the specification, it could have done so. But such a limitation must be expressly stated—such as when McKesson limited claim 2 to the ePPi preferred embodiment. Claim 14 does not differentiate between different types of databases, and the claim only requires that the database servers be capable of maintaining complex relationships. Therefore, the Court will not limit "a database server capable of maintaining complex relationships" to relational databases.

The Court must nevertheless define this phrase. Other than describing relational databases as the preferred embodiment, the specification and the prosecution history do not define "database servers capable of maintaining complex relationships." In addition, McKesson does not propose a general definition for database servers capable of maintaining complex relationships—other than limiting such database servers to relational databases.

Epic, on the other hand, suggests that one of ordinary skill in the art would understand that a database server capable of maintaining complex relationships means that the database server is able to relate multiple pieces of data to each other. This construction is consistent with the ordinary meaning of those terms. Merriam-Webster defines "complex" as "a whole made up of complicated or interrelated parts" FN1 and "relationship" as "the state of being related or interrelated." FN2

FN1. *See* <http://www.merriam-webster.com/dictionary/complex>.

FN2. See <http://www.merriam-webster.com/dictionary/relationships>.

Therefore, the Court construes "logical mappings that reside in a database server capable of maintaining complex relationships" to mean "logical associations, which are used to relate sets of information in order to determine what information is relevant to a particular user, that are located in a database server that is capable of relating multiple pieces of data to each other." This construction is consistent with the language of claim 14, and it does not limit the claim to the preferred ePPI embodiment.

IV. Conclusion

For the foregoing reasons, the Court construes the disputed claim phrases as follows:

Claim Phrase in Dispute	Court's Construction
"automatically and electronically communicating"	Not construed.
"health-care provider"	"an individual, entity, group of individuals, group of entities, or combination thereof that provides healthcare services"
"plurality of users"	"two or more users, a user being a patient, a parent, a guardian or other patient representative"
"provider/patient interface"	"software for a personalized web page or area within the provider's Web site by which the health-care provider and the patient can exchange inquiries, responses, data, services and information"
"provider-patient interface service center"	"software that links the central server to the provider's unique website by obtaining content from the central server and dynamically assembling and delivering that content to the website"
"mapped content"	"information previously provided by the provider to the central server that is logically associated with the user who initiated the communication"
"said provider/patient interface providing a fully automated mechanism for generating a personalized page or area"	"the provider/patient interface provides a mechanism by which the user's personalized web page or area is automatically generated without the need for the user or provider to manually construct the web page or area"
"dynamically assembling and delivering custom content to said user"	"collecting information, such as articles or instructions, that is logically associated with the user or the content of the user's communication and automatically delivering that information to the user in response to the user's communication"
"electronic provider-patient interface system (the "ePPI system")"	"one or more server computers performing various tasks and working in concert, which are made up of the following functional components:

(1) a Web server capable of responding to HTTP requests from users by sending HTML formatted documents;

(2) a database server capable of maintaining complex relationships

between practices, patients, doctors, and healthcare informational content;

(3) a modular data collection program that receives information from providers' scheduling and billing systems, reformats the information, and stores it in the database; and

	(4) an electronic mailing capability which supports the automated transmission of notifications to patients as well as the transmission of notifications to practice-designated personnel."
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"logical mappings that reside in a database server capable of maintaining complex relationships"

"logical associations, which are used to relate sets of information in order to determine what information is relevant to a particular user, that are located in a database server that is capable of relating multiple pieces of data to each other"

SO ORDERED.

N.D.Ga.,2008.

McKesson Information Solutions LLC v. Epic Systems Corp.

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