

United States District Court
Northern District of California

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

X.COMMERCE, INC.,
Plaintiff,

v.

EXPRESS MOBILE, INC.,
Defendant.

Case No. [17-cv-02605-RS](#)

**AMENDED ORDER CONSTRUING
CLAIMS**

I. INTRODUCTION

Plaintiff X.Commerce, Inc., which does business as “Magento,” seeks declaratory relief that its products do not infringe certain patents held by defendant Express Mobile, Inc., and/or that the relevant claims of the patents are invalid. Pursuant to the Local Patent Rules, the parties have presented a limited number of terms for construction by the court. The terms will be construed as set out below.

II. BACKGROUND

There are two patents in suit, U.S. Patent Nos. 6,546,397 (the ’397 patent) and 7,594,168 (the ’168 patent) which share a specification. Although one term proposed for construction appears in slightly different wording in the two patents, neither side argues that difference is material. Express Mobile contends the patents “bring together a number of disparate ideas and concepts, to create a new paradigm for creating, storing, and building web pages.”

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1 According to Express Mobile, prior to the invention of the patents, web pages were
2 created, stored and rendered in a fundamentally different manner. Individual web pages were
3 typically created by either programming directly in HTML or JavaScript code, or by using a visual
4 editor that output HTML formatted files. These approaches allegedly were cumbersome and
5 inflexible, in various respects.

6 The inventive methodology purportedly described in the patents involves building a web
7 page by defining it as a set of user-selected “objects” and/or “settings.” The result is not a markup
8 language code file for the web page, but instead a collection of user selected objects and object
9 attributes. These can be saved in a database, for ease of access and efficient storage. Express
10 Mobile explains that because complete code files for each page do not need to be stored, the page
11 structure—the full HTML code itself—is created on the fly each time the page is loaded in a
12 user’s Web browser. This is achieved in part through a browser-appropriate “run time engine” and
13 related files.

14 Magento, in turn, describes itself as “the leading platform for e-commerce innovation,
15 integrating online and physical shopping features to provide customers with a unique and rich e-
16 commerce experience.” Merchants, on their own or with assistance from Magento’s “solution
17 partners,” supposedly can use Magento’s technology to build and deploy custom e-commerce
18 sites.

19 Magento’s Enterprise Edition technology (now known as Commerce), is the accused
20 product. Magento insists, however, that its technology does not generate or render websites or web
21 pages—and that any such technology is outside of Magento’s control. Magento also argues that
22 use of the Enterprise Edition technology requires “technical savvy,” and “is not as simple as
23 dragging and dropping elements to visually create a website, as contemplated by the asserted
24 patents.” Such arguments, of course, are beyond the scope of claim construction, and Magento
25 does not suggest otherwise.

III. LEGAL STANDARD

Claim construction is a question of law to be determined by the courts. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). “Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). Accordingly, a claim should be construed in a manner “most naturally align[ed] with the patent’s description of the invention.” *Id.*

The first step in claim construction is to look to the language of the claims themselves. “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). A disputed claim term should be construed in a manner consistent with its “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, i.e., as of the effective filing date of the patent application.” *Id.* at 1312–13. The ordinary and customary meaning of a claim term may be determined solely by viewing the term within the context of the claim’s overall language. *See id.* at 1314 (“[T]he use of a term within the claim provides a firm basis for construing the term.”). Additionally, the use of the term in other claims may provide guidance regarding its proper construction. *See id.* (“Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.”).

A claim should also be construed in a manner consistent with the patent’s specification. *See Markman*, 52 F.3d at 979 (“Claims must be read in view of the specification, of which they are a part.”). Typically, the specification is the best guide for construing the claims. *See Phillips*, 415 F.3d at 1315 (“The specification is . . . the primary basis for construing the claims.”); *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (“[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single

best guide to the meaning of a disputed term.”). In limited circumstances, the specification may be used to narrow the meaning of a claim term that otherwise would appear to be susceptible to a broader reading. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001). Precedent forbids, however, term construction imposing limitations not found in the claims or supported by an unambiguous restriction in the specification or prosecution history. *See Laitram Corp. v. NEC Corp.*, 163 F.3d 1342, 1347 (Fed. Cir. 1998) (“[A] court may not import limitations from the written description into the claims.”); *Comark Commc’ns., Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998) (“[W]hile . . . claims are to be interpreted in light of the specification, it does not follow that limitations from the specification may be read into the claims.”); *SRI Int’l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc) (“It is the *claims* that measure the invention.”) (emphasis in original). A final source of intrinsic evidence is the prosecution record and any statements made by the patentee to the PTO regarding the scope of the invention. *See Markman*, 52 F.3d at 980.

Courts may also consider extrinsic evidence, such as expert testimony, dictionaries, or technical treatises, especially if such sources are “helpful in determining ‘the true meaning of language used in the patent claims.’” *Phillips*, 415 F.3d at 1318 (quoting *Markman*, 52 F.3d at 980). Ultimately, while extrinsic evidence may aid the claim construction analysis, it cannot be used to contradict the plain and ordinary meaning of a claim term as defined within the intrinsic record. *See id.* at 1322–23.

IV. DISCUSSION

1. “VIRTUAL MACHINE” – Claims 1, 2, 9, and 37 of the ’397 patent

Express Mobile’s Proposed Construction	Magento’s Proposed Construction
An abstract machine that is not built in hardware but is emulated in software.	An abstract machine emulated in software that executes compiled code.

There is no dispute between the parties that a person of ordinary skill in the art would understand “virtual machine” in the context of these patents to refer to a software program that emulates the functions of a hardware processor. The specification refers specifically to a Java Virtual Machine (“JVM”). Using a JVM permits software written in the Java programming language to run on different hardware platforms. Java itself is a “high-level” language—it uses English words that a human programmer can produce and understand. A program written in Java is then run through a “compiler,” another program that in effect “translates” the high-level language into “bytecode.” Bytecode is an intermediate language no longer easily read by humans, but still not directly usable by the computer processor. The JVM then turns the bytecode into the machine language native to the particular hardware platform. It does so through a process that may involve both “interpreting” and further compilation, known as “just in time” compilation. In some instances, a JVM can also pass-through instructions that are already in the instruction set native to the platform.

Magento insists “virtual machine” should be construed to include a requirement that it execute compiled code, such as bytecode. Magento relies on the fact that the JVM executes compiled code and that there is no reference in the specification to any virtual machine not executing compiled code. Magento also argues that the inventor distinguished certain prior art by arguing to the examiner that his invention allowed changes to a web page without requiring “recompilation” of the code. Magento contends the inventor thereby recognized that compilation

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1 is required in the first instance, or he would have sought to distinguish the prior art on grounds that
2 the invention does not require compiling at all.

3 It is apparent that the specification was drafted to explain the invention in the context of
4 the JVM, the then-dominant virtual machine in the particular technological context. It is also clear
5 that the JVM only executes compiled code.¹ It simply does not follow, however, that the patent
6 claims are limited to virtual machines that execute compiled code. Magento has failed to show
7 that anything in the term “virtual machine” as used in the patent or in the art at the time would
8 have been understood by a person of ordinary skill in that art necessarily to be limited to virtual
9 machines that execute compiled code.

10 Accordingly, “virtual machine” will be construed as: An abstract machine that is not built
11 in hardware but is emulated in software.

26 ¹ Express Mobile suggests otherwise, but the examples to which it points do not appear to involve
27 the code input to, and executed by, the JVM.

2. “RUN TIME ENGINE” – Claim 24 of the ’397 Patent
 “RUNTIME ENGINE” – Claim 1 of the ’168 Patent

Express Mobile’s Proposed Construction	Magento’s Proposed Construction
A file that is executed at runtime that facilitates retrieval of information from the database and generates commands to display a web page or website.	A file containing compiled code that, when executed at runtime in the browser, reads information from the database and calls previously compiled code in the instruction set of the virtual machine, which is executed by the virtual machine to display a web page or website. (or, alternatively) A file containing compiled code in the instruction set of the virtual machine that, when executed at runtime in the browser, reads attributes of a webpage from the database and generates virtual machine commands to display the web page.

The parties’ primary dispute here turns on the same issues regarding “compiled code” as discussed above, and Magento’s proposal to include that term in the construction must be rejected for the same reasons. Magento further proposes specifying that the file is executed at runtime “in the browser.” Although little dispute appears that the file is in fact executed at runtime “in the browser,” Magento has not made a persuasive showing that the additional words serve to add clarity or are otherwise warranted.

Finally, Magento proposes the phrase, “reads information from the database,” which is consistent with the specification. Express Mobile’s proposal—“facilitates retrieval of information from the database”—introduces unwarranted ambiguity not grounded in anything expressly described in the specification. Accordingly, “run time engine” and “runtime engine” will be construed as:

A file that is executed at runtime that reads information from the database and generates commands to display a web page or website.

3. “AT LEAST ONE RUN TIME FILE” – Claims 1 and 2, ’397 Patent;
“ONE OR MORE RUN TIME FILES” Claim 37, ’397 Patent

Express Mobile’s Proposed Construction	Magento’s Proposed Construction
One or more files, including a run time engine, that are downloaded or created when a browser is pointed to a web page or website.	One or more files, including a run time engine, that are downloaded and executed by a browser to display a webpage when the browser is pointed to a web page.

The parties’ primary dispute regarding this term turns on whether a file that is not “executable” qualifies as a “run time file.” The parties agree image files and other similar files are not executable, and that the patent describes such files as among those that can be downloaded. Magento correctly observes, however, that does not make them “run time files.” Its proposed inclusion of the phrase “and executed” appropriately captures this concept.

Express Mobile, in turn, proposes including “or created,” to reflect that files need not be in existence at the moment the browser is pointed to a webpage. Although Magento insists the patent only describes downloading existing files, it has not shown the claims require the files to be in existence at the time the browser is pointed to the webpage. Accordingly, the terms “at least one run time file” and “one or more run time files” will be construed as:

One or more files, including a run time engine, that are downloaded or created, and executed by a browser to display a webpage when the browser is pointed to a web page.

4. “DATABASE” – Claims 1, 2, 3, 9, 14, and 37, ’397 Patent; Claim 1, ’168 Patent

Express Mobile’s Proposed Construction	Magento’s Proposed Construction
An electronic information storage system offering data storage and retrieval.	An electronic information storage system offering data storage and retrieval, that stores information on a record-by-record basis, each record divided into one or more fields, with functions for searching and sorting the records.

Magento proposes a lengthy construction for the common term “database” that specifies in some detail the structure of a typical database and how it works. Although the description appears to be generally accurate, Magento has not made a showing that such a specific listing of database attributes is warranted, or that Express Mobile’s proposal does not adequately capture the meaning of the term as it would have been understood by a person of ordinary skill in the art. Express Mobile’s proposal will be adopted.

5. “CONTEMPORANEOUSLY” – Claim 37, ’397 Patent

Express Mobile’s Proposed Construction	Magento’s Proposed Construction
Happening at the same period of time.	Occurring immediately after, from a human perspective.

The patent claims use the terms “contemporaneously” or “substantially contemporaneously” in the context of one event following as an immediate consequence of another. For example, Claim 1 of the ’397 patent refers to “generating a display in accordance with one or more user selected settings substantially contemporaneously with the selection thereof.” Thus, the user selects a setting, and a display is generated accordingly. By definition, the selection of a setting must occur first in time—the display is a response. It is clear, therefore,

1 that the patentee did not use “contemporaneously” in its ordinary sense of “occurring at the *same*
2 time. Rather, the context makes clear that “contemporaneously” means the second event occurs
3 immediately after the first, with no significant delay.

4 The parties’ dispute, however, also focuses on the phrase “from a human perspective,”
5 which Magento argues belongs in the construction of “contemporaneously” and Express Mobile
6 contends serves to distinguish “substantially contemporaneously” from “contemporaneously.”
7 Although there is some reference in the specification to human perception, including that phrase in
8 the construction does not add clarity or assist in distinguishing between “substantially
9 contemporaneously” and “contemporaneously.” If the claims called for two events to occur
10 simultaneously (i.e., the ordinary meaning of “contemporaneously”), *then* it might be necessary to
11 specify that the events only had to be simultaneous within the limits of human perception. Here,
12 however, the claims only call for one event to follow immediately from another. The immediacy
13 is, of course, still judged from a human perspective, but there is no particular need to specify that.

14 Accordingly, “contemporaneously” will be construed as “occurring immediately after.”
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16 6. “SUBSTANTIALLY CONTEMPORANEOUSLY” – Claims 1 and 2 of the ’397 Patent
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Express Mobile’s Proposed Construction	Magento’s Proposed Construction
Happening at the same period of time from a human perspective.	Indefinite.

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22 The law is well-settled that use of a term like “substantially” does not ordinarily render a
23 claim indefinite. *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014)
24 (“Claim language employing terms of degree has long been found definite where it provided
25 enough certainty to one of skill in the art when read in the context of the invention.”). Here, but
26 for the fact that one claim uses “contemporaneously” and two claims use “substantially
27 contemporaneously,” there would be no question that “substantially contemporaneously” is
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1 reasonably definite.

2 As it stands, while the claims may not represent model draftsmanship, there is not a basis
3 to invalidate them. Because it is likely that the omission of “substantially” from Claim 37 was
4 inadvertent, it is perhaps not accurate to call its inclusion here “surplusage.” Whether accidentally
5 omitted from one place or unnecessarily included in another, however, there is neither a basis nor
6 a need to assign differing meanings to the two terms. *See, Pickholtz v. Rainbow Techs., Inc.*, 284
7 F.3d 1365, 1373 (Fed. Cir. 2002) (“Although we would typically be inclined to give meaning to
8 the word ‘system,’ rather than regard it as surplusage . . . the patent in this case provides no
9 indication that the two terms mean different things.”). Accordingly, “substantially
10 contemporaneously” and “contemporaneously” will both be construed as “occurring immediately
11 after,” in neither case requiring a specific minimum time period to constitute “immediately.”
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14 7. “BUTTON” – Claims 6, 9, 14, 17, and 20, ’397 Patent; Claims 1, 2, and 3, ’168 Patent
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Express Mobile’s Proposed Construction	Magento’s Proposed Construction
A graphic object that, when activated through user interaction, performs a specified function.	A graphic object that, when activated through user interaction with the graphic object, performs a specified function.

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20 Although the parties’ original proposals for construing the term “button” differed more
21 significantly, they now are in substantial agreement. Magento’s proposal to include “with the
22 graphic object” is rejected as unnecessary. That the user interaction is “with the graphic object” is
23 already conveyed by construction proposed by Express Mobile. That construction will be
24 adopted.
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8. “MULTIMEDIA OBJECTS” – Claims 4 and 5, ’397 Patent

Express Mobile’s Proposed Construction	Magento’s Proposed Construction
The combination of data consisting of colors, fonts, images, audio clips, video clips, text areas, URLs and thread objects, sound, graphics, animation and/or video that is treated as a discrete entity.	Indefinite.

There seems to be no dispute that word “multimedia” had a clear ordinary meaning to a person of ordinary skill in the art at the time of the alleged invention—multiple types of media, *i.e.*, a “combination of sound, graphics, animation, and video.” Magento argues examples given in specification—“a color, a font, a thread object”—contradict the ordinary meaning of the term, make it obvious the patentee used “multimedia objects” in an unusual sense. Magento then insists the specification provides no guidance about what the term means beyond the “odd examples,” rendering the scope of the term indefinite.

A patentee, of course, may act as his own “lexicographer.” *Poly-America, L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016). Magento contends that principle does not save the term because the specification does not clearly set forth a definition of the term “multimedia objects,” instead offering only “non-limiting examples.”

Although perhaps not a model of clarity, the specification adequately demonstrates the patentee’s intent that the term “multimedia objects” be understood to encompass the items listed in Express Mobile’s proposed construction. Accordingly, that construction will be adopted.

9. “TIMELINE(S)” and “TIME LINE(S)” – Claims 11, 14, 15, 17, and 20, ’397 Patent;
Claims 1 and 3, ’168 Patent

Express Mobile’s Proposed Construction	Magento’s Proposed Construction
Independent process that defines one or more values for an object, including its appearance, animation, speed, and/or resolution over time.	A sequence of changes that define the attributes of a text button or image object as the changes occur.

The specification expressly states: “A time line is an independent asynchronous process that defines the existence of a given text button or image object.” ’397 patent at 36:50-52. Magento’s proposed construction is intended to restate this definition in simpler language. Express Mobile’s proposed construction, in contrast, expands the definition to capture additional concepts and features. Although Express Mobile is correct that references to timelines appear throughout the specification, it has not shown that any of those references support departing from or expanding on the express definition given at 36:50-52. As Magento’s proposal fairly reflects that definition, it will be adopted.

10. AGREED CONSTRUCTIONS

The parties have reached agreement on construction of two terms. As those constructions appear to be supported by the specification, they will be adopted. Accordingly, “transformation” (’397 patent, claim 11) (’168 patent, claim 1) will be construed as:

The changing of an object from one state to another based on a timer control, subject to user settings.

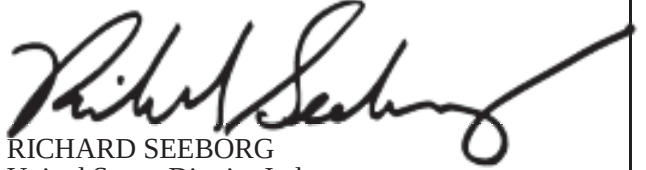
Additionally, “settings” (’397 Patent, Claims 1, 2, 9, and 37) will be construed as:

An attribute of an object available for selection.

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1 **IT IS SO ORDERED.**

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3 Dated: September 12, 2018

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6 RICHARD SEEBORG
7 United States District Judge
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