

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

**WITNESS SYSTEMS, INC,**  
Plaintiff.

v.

**NICE SYSTEMS, INC., and Nice Systems, Ltd,**  
Defendants.

Civil Case No. 1:04-CV-2531-CAP

**Nov. 22, 2006.**

Christopher Owen Green, Daniel Arthur Kent, Nagendra Setty, George Laszlo Kanabe, Noah C. Graubart, Fish & Richardson, P.C., Atlanta, GA, for Plaintiff.

Robert Laurenzi, Scott G. Lindvall, Kaye Scholer LLP, New York, NY, William Bradley Hill, Jr., Joseph C. Sharp, Ashe Rafuse & Hill, Atlanta, GA, for Defendants.

### **SPECIAL MASTER'S REPORT AND RECOMMENDATION ON CLAIM CONSTRUCTION**

**RODERICK R. McKELVIE, Judge.**

This is a patent infringement case. Plaintiff Witness Systems, Inc. is a Delaware corporation with its principal place of business in Roswell, Georgia. Witness owns U.S. Patent Nos. 5,790,798 ("the '798 Patent") and 6,510,220 ("the '220 Patent") (collectively, "the patents-in-suit"), which describe methods, and systems for simultaneously monitoring computer user screen and telephone activity from a remote location.

Defendant NICE Systems, Ltd. is a corporation organized under the laws of Israel, with its principal place of business in Ra'anana, Israel. Defendant NICE Systems, Inc. is a subsidiary of NICE Systems, Ltd, and is a Delaware corporation with its principal place of business in Rutherford, New Jersey.

In complaints that have now been consolidated, Witness alleges that NICE Systems, Ltd. and NICE Systems, Inc. (collectively, "NICE") infringe and are inducing, others; to infringe claims of the '798 and '220 Patents by importing, marketing, and selling their Customer Experience Management Products, including computer-based systems and software they market as Nice Advantage(R), NICE Perform(TM), and NiceUniverse(R). NICE denies infringement and has counterclaimed for a judgment that the claims of the '798 and '220 Patents are invalid.

On March 14, 2006, the Court appointed Roderick R. McKelvie of Covington & Burling LLP as Special Master to supervise discovery proceedings, preside over the claim construction hearing, and submit to the Court a report and recommendation on claim construction.

The parties have submitted a Joint Claim Construction Statement and briefs on the disputed claim terms. On September 7, 2006, the parties submitted argument and testimony on those terms. At the September 7 hearing, Witness called and offered testimony from Dr. James David Foley, the Stephen Fleming Chair in Telecommunications in the Interactive and Intelligent Computing Division of the College of Computing at Georgia Tech. NICE called and offered testimony from Dr. Aaron Bobick, the Chair of the Interactive and Intelligent Computing Division of the College of Computing at Georgia Tech.

This is the Special Master's Report and Recommendation on the construction of the disputed terms.

## ***I. FACTUAL AND PROCEDURAL BACKGROUND***

The Special Master draws the following facts from the affidavits and documents submitted by the parties, the parties' presentations at the September 7, 2006 hearing, and the specifications and prosecution histories of the patents-in-suit.

### ***A. General Description of the Technology***

The patents at issue relate to technologies for monitoring work performed by agents located at "call centers" where, for example, during a telephone conversation with a customer, an agent enters information about that customer into a computer. The patents-in-suit claim systems and methods for monitoring, recording, and playing back not only what is said during a telephone call, but also the screen changes that occur on the agent's computer screen during that call.

For example, this technology might be used to record a telephone conversation during which a customer tells a service agent that the customer expects to pay off a balance due on an account by a particular date. The claimed technology could be used to record not only the telephone conversation between the customer and agent, but also the changes that occur on the agent's computer screen during the call (such as entries that the agent made into the computer during the call to note, for example, the statement that the client made on when he would pay the balance, etc.). The claimed technology enables the agent's supervisor to remotely record, and then later play back simultaneously, the telephone conversation and the computer entries that the agent made during the call.

### ***B. Prosecution History of the '798 Patent***

The '798 Patent issued from U.S. Patent Application No. 08/657,765 ("the '765 Application"), which was filed on May 31, 1996. The '765 Application included three claims directed to methods and systems for simultaneously monitoring computer user screen and telephone activity from a remote location. FN1

FN1. The claims of the '765 Application, as originally filed, were as follows:

1. A method of remotely monitoring on-screen activities of a monitored computer workstation, said monitored computer workstation having a display screen, operating system software, and a display driver, comprising the steps of:

A) intercepting and interpreting at least one graphics primitive function call made to said display driver to define a localized changed screen region sized less than said display screen;

B) utilizing the boundaries of said localized changed region to make a copy of said changed region by use of said operating system; and

C) transporting said changed region copy to a remote location for view on the screen of a separate,

monitoring workstation, such that said screen of said monitoring workstation periodically reflects screen changes made on said monitored workstation.

2. A method of remotely monitoring on-screen activities of a monitored computer workstation, said monitored computer workstation having a display screen, operating system software, and a display driver, comprising the steps of:

A) comparing two sequential screen displays and determining a localized changed region including screen differences; between said two full screen displays;

B) utilizing the boundaries of said localized changed region to make a copy of said changed region by use of said operating system; and

C) transporting said changed region copy to a remote location for view on the screen of a separate, monitoring workstation, such that said screen of said monitoring workstation periodically reflects screen changes made on said monitored workstation.

3. A method of monitoring sequential on-screen activities of a monitored computer workstation having a display screen and a telephone extension, said method comprising:

A) determining sequential localized changed screen regions; which correspond to sequential screen changes;

B) recording a telephone conversation occurring during the definition of at least two sequential screen changes; and

C) playing back said telephone conversation portion in substantial synchronization with said sequential screen changes, to allow one at said monitoring workstation to simultaneously monitor on-screen and telephone conversations occurring at said monitored workstation.

In an Office Action dated July 30, 1997, the PTO examiner rejected claim 2 as being anticipated by U.S. Patent No. 5,485,569 (Goldman, et al.) and claim 3 as being anticipated by an article authored by Steve McNamara, entitled "Quality Must Be Seen and Heard." The examiner also rejected all three claims under Section 112, on the grounds that there was an insufficient antecedent basis for the term "the boundaries" in claims 1-2 and an insufficient basis for the term "the definition" in claim 3. The examiner stated that claim 1 would be allowable if rewritten or amended to overcome the rejection. On September 24, 1997, the examiner held an interview with the applicants. In a summary of that interview, the examiner stated:

Applicant proposed amending claim 3 to overcome the cited art. Applicant proposed adding language emphasizing that the claimed system plays back sequential screen changes in synchronism with the recorded telephone conversation. The examiner indicated that this language appeared to overcome the cited art-subject to further search and consideration.

The applicants submitted a Response to Office Action on September 25, 1997. In that Response, the applicants deleted claim 2, amended claims 1 and 3, and added one new independent claim and three dependent claims. Application claims 1 and 3 were amended as follows:

1. A method of remotely monitoring on-screen activities of a monitored<sup>2</sup> computer workstation, said monitored computer workstation having a display screen, operating system software, and a display driver, comprising the steps of:

A) intercepting and interpreting at; least one graphics primitive function call made to said display driver to define *boundaries of* a localized changed screen region sized less than said display screen;

B) utilizing *said* the boundaries of said localized changed region to make a copy of said changed region by use of said operating system; and

C) transporting said changed region copy to a remote location for view on the screen of a separate, monitoring workstation, such that said screen of said monitoring workstation periodically reflects screen changes made on said monitored workstation.

3. A method of monitoring *on a monitoring workstation* sequential on-screen activities of a monitored computer workstation having a display screen and a telephone extension, said method comprising:

A) determining sequential localized changed screen regions which correspond to *at least two* sequential screen changes;

B) recording a telephone conversation occurring during the definition of at least two sequential *said* screen changes; and

C) playing back said telephone conversation portion in substantial synchronization with said sequential screen changes *substantially as they both happened in real time*, to allow one at said monitoring workstation to simultaneously monitor *view* on-screen *activities* and *listen to* telephones conversations *substantially as they occurred* occurring at said monitored workstation.

In the Response, the; applicants argued in part that the amended claims were patentable because the McNamara reference, which: the applicants; asserted was the only prior art discussed with the examiner during the September 24 interview, does not disclose the concept of "playing back" the "telephone conversation" portion of the transaction.

On October 15, 1997, the examiner issued a Notice of Allowability as to all of the pending claims.

On August 4, 1998, the United States Patent and Trademark Office issued the ' 798 Patent to assignee Witness. The '798 Patent is entitled "Method and Apparatus for Simultaneously Monitoring Computer User Screen and Telephone Activity from a Remote Location."

### ***C. Prosecution History of the '220 Patent***

The '220 Patent issued from U.S. Patent Application No. 09/041,460 ("the ' 460 Application"), which was filed on March 12, 1998. The '460 Application is; a continuation of the '765 Application (from which the '798 Patent issued). As initially filed, the '460 Application included a total of three claims directed to a method and apparatus for simultaneously monitoring computer user screen and telephone activity from a remote: location.FN2

FN2. Claims 1 and 3 of the '460 Application, as; originally filed, were as follows:

1. A method of remotely monitoring on-screen activities of a monitored computer workstation, said monitored computer workstation having a display screen, operating system software, and a display driver, comprising the steps of:

A) intercepting and interpreting at least one graphics primitive function call made to said display driver to

define a localized changed screen region sized less than said display screen;

B) utilizing the boundaries of said localized changed region to make a copy of said changed region by use of said operating system; and

C) transporting said changed region copy to a remote location for view on the screen of a separate, monitoring workstation, such that said screen of said monitoring workstation periodically reflects screen changes made on said monitored workstation.

3. A method of monitoring sequential on-screen activities of a monitored computer workstation having a display screen and a telephone extension, said method comprising:

A) determining sequential localized changed screen regions which correspond to sequential screen changes;

B) recording a telephone conversation occurring during the definition of a least two sequential screen changes; and

C) playing back said telephone conversation portion in substantial synchronization with said sequential screen changes, to allow one: at said monitoring workstation to simultaneously monitor on-screen and telephone conversations occurring at said monitored workstation.

In a Preliminary Amendment filed on July 27, 1998, the applicants deleted originally filed claim 2 and amended originally filed claims 1 and 3 to claim systems for, rather than methods of, monitoring on-screen activities of a monitored computer workstation. The applicants also requested the addition of six new claims.

In a Preliminary Amendment filed on November 25, 1998, the applicants requested deletion without prejudice of all previously filed claims and requested addition of new claims 10-22.

In an Office Action dated January 2, 2000, the PTO examiner rejected all pending claims on several grounds. First, the examiner rejected claims 10-16 as being unpatentable over U.S. Patent No. 5,535,256 ("the Maloney patent"). FN3 Second, the examiner rejected claims 12-15 under Section 112, on the basis of indefiniteness. Third, the examiner rejected claims 10-12 and 17-19 on the grounds that there were insufficient antecedent bases for various limitations therein. Finally, the examiner rejected claims 17-22 on the grounds of double patenting and claims 10-16 on the grounds of obviousness-type double patenting, in light of claims 1-6 of the ' 798 Patent.

FN3. In the January 2 Office Action, the examiner states that this rejection was made under Section 103(a) on the grounds of obviousness. However, the Maloney patent is the only prior art cited by the examiner as constituting the basis for that rejection.

On July 23, 2000, the applicants amended application claims 17, 18, and 19 to overcome the double patenting objection. Application claims 17 and 18 were amended as; follows:

17. A method of remotely monitoring on-screen activities of a monitored computer workstation, said monitored computer workstation having a display screen, operating system software, and a display driver, comprising the steps of:

A) intercepting and interpreting at least *two* one graphics primitive function call *calls* made to said display driver to define a localized changed screen region sized less than staid display screen;

B) utilizing the boundaries of said localized changed *screen* region to make a copy of said *localized* changed

*screen* region by use of said monitored *computer* workstation operating system; and

C) transporting said changed region copy to a remote location for view on the screen of a separate monitoring workstation having a separate operating system, such that said screen of said monitoring workstation periodically reflects screen changes made on said monitored workstation.

18. A method, of monitoring on a monitoring workstation, sequential on-screen activities of a monitored computer workstation having a display screen, its own operating system, and a telephone extension, said method comprising:

A) determining sequential localized changed screen regions which correspond at least two sequential screen changes, by use: of said monitored *computer* workstation operating system;

B) recording a telephone conversation occurring *before said screen changes*, during *said screen changes*, and *after* said screen changes; and

C) playing back said telephone conversation recording in substantial synchronization with said *at least two* sequential screen changes substantially as they both happened in real time, to allow one at said monitoring *computer* workstation to simultaneously view on-screen activities and listen to telephone conversations substantially as: they occurred at said monitored *computer* workstation.

On January 21, 2003, the United States Patent and Trademark Office issued the '220 Patent, which is entitled "Method and Apparatus for Simultaneously Monitoring Computer User Screen and Telephone Activity from a Remote Location." The '220 patent contains 6 claims, with application claims 1 and 18 having; issued as claims 1 and 2.

## **II. DISCUSSION**

The construction of the claims in a patent is a matter exclusively within the province of the court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). In construing a patent's claims, the court must begin with the intrinsic evidence in the record, namely the words of the claims themselves, the specification, and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed.Cir.2005) (en banc). "Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996).

The starting point in claim construction is the language of the claims themselves. *Id.* Words of a claim are generally given their ordinary and customary meaning, unless a patentee has clearly set forth a different definition in the specification or file history. *Id.* Moreover, "the ordinary and customary meaning of the claim term 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." *Phillips*, 415 F.3d at 1313.

The claims do not stand alone and must be read in view of the specification, of which they are a part. *See id.* at 1315. As the Federal Circuit has stated:

The specification contains a written description of the invention which must be clear and complete enough

to enable those of ordinary skill in the art to make and use it. Thus, 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.

Vitronics, 90 F.3d at 1582. Additionally, the prosecution history is often of critical significance in determining the meaning of the claims. *Markman*, 517 U.S. at 980 ("The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution.").

Although the Federal Circuit has held that claims should be read in light of the specification and prosecution history, the court has repeatedly cautioned against limiting the scope of the claim to the preferred embodiment or specific examples disclosed in the specification. *See, e.g.*, *Ekchian v. Home Depot*, 104 F.3d 1229, 1303 (Fed.Cir.1997); *Intervet America, Inc. v. Kee-Vet Labs., Inc.*, 887 F.2d 1050, 1053 (Fed.Cir.1989) ("[L]imitations appearing in the specification will not be read into claims, and ... interpreting what is meant by a word in a claim, 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper.' ").

The court may exercise its sound discretion to consider extrinsic evidence presented by the parties. *Phillipps*, 415 F.3d at 1319. All evidence external to the patent and prosecution history is considered extrinsic. *Id.* at 1317. Although extrinsic evidence can shed light on the; relevant art, it is less significant than intrinsic evidence in construing claims and "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1319. It is well-established that "extrinsic evidence may never be used 'for the purpose of varying or contradicting the terms in the claims.' " *Interactive Gift Express, Inc. v. CompuServe, Inc.*, 256 F.3d 1323, 1331 (Fed.Cir.2001) (citing *Markman*, 52 F.3d at 981).

### ***A. Claim Terms in Dispute***

The parties disagree on the proper construction for the following terms, which for purposes of illustration are highlighted in bold in claims 1, 2, 3, and 6 of the '798 Patent.

1. A method, of remotely **monitoring** on-screen activities of a monitored computer workstation, said monitored computer workstation having a display screen, operating system software, and a display driver, comprising the steps of:

A) **intercepting and interpreting at least one graphics primitive function call made to said display driver to define boundaries** of a localized changed screen region sized less than said display screen;

B) **utilizing said boundaries of said localized changed region to make a copy of said changed region** by use of said operating system; and

C) transporting said changed region copy to a remote location for view on the screen of a separate, monitoring workstation, such that said screen of said monitoring **workstation** periodically reflects screen changes made on said monitored workstation.

2. A method of monitoring on a monitoring workstation sequential on-screen activities of a monitored computer workstation having a display screen and a telephone extension, said method comprising:

A) **determining sequential *localized changed screen regions* which correspond to at least two sequential screen changes;**

B) **recording** a telephone conversation occurring during said screen changes; and

C) **playing back said telephone conversation recording in substantial synchronization with said sequential screen changes substantially as they both happened in real time**, to allow one at said monitoring workstation to simultaneously view on-screen activities and listen to telephone conversations substantially as they occurred at said monitored workstation.

3. A method of monitoring on a monitoring workstation sequential on-screen activities of a monitored computer workstation having a display screen and a telephone extension, said method comprising:

A) recording data corresponding to two actual sequential screen changes occurring at said monitored workstation and storing said screen change-related data;

B) **recording; data corresponding to audio telephone conversation** occurring at said monitored workstation and storing said audio telephone conversation-related data; and

C) subsequent to steps "A" and "B", playing back with the: use of said screen change-related data and said audio telephone conversation related-data, said audio telephone conversation in substantial synchronization with said sequential screen changes as they both happened in real time at said monitored workstation, to allow one at said monitoring workstation to simultaneously view and hear on-screen and telephone activities substantially as they occurred at said monitored workstation.

\* \* \*

6. The method as claimed in claim 4, wherein said data in steps "A" and "B", are recorded on a **separate server remote from said monitored and said monitoring workstations** but, connected thereby through a network.

## **B. "*monitoring*"**

The preamble of each independent claim of the '798 and '220 Patents contains the term "monitoring." Specifically, claim 1 describes a "method of remotely monitoring on-screen activities of a monitored computer workstation." Claims 2 and 3 describe a "method of monitoring, on a monitoring; workstation, sequential on-screen activities of a monitored computer workstation." Step (c) of claims 1-3 and claim 6 of the '798 and '220 Patents also employ the term "monitoring," in the context of the phrases "monitoring workstation" and/or "monitoring computer workstation."

Witness contends that the term "monitoring" does not need construction. Witness argues in the alternative, however, that if the Court finds this term does require construction, it should be construed to mean "listening to and/or observing an activity for the purpose of evaluation, either while the activity is underway, or at a later time, or both, from a position, equipped, with a computer and optionally a telephone."

In support of the "either while the activity is underway, or at a later time, or both" language in its proposed construction, Witness first points to claim 3 of the '798 Patent, 'which recites a method of monitoring

comprising the steps of recording, storing, and playing back a telephone conversation. Witness argues that claim 3 clearly indicates that the term "monitoring" refers to both live and delayed monitoring. Next, Witness contends; that the specification supports a construction that encompasses both live and delayed monitoring. Specifically, Witness points to the references in the specification to "viewed (or 'monitored'), ... in real time ... and/or at a later time" and "live and later monitoring is possible," Lastly, Witness argues that extrinsic evidence supports its proposed construction. Specifically, Witness states that the 1996 edition of *The Call Center Dictionary: The Complete Guide to Call Center and Customer Support Technology Solutions* describes "monitoring" as occurring either live or at a later time.

Although NICE asserts that it "now agrees" that the term "monitoring" does not require construction, it objects; to the "for the purpose of evaluation" language in Witness's proposed construction. NICE argues that neither the specification nor the prosecution history requires that the claimed methods of "monitoring" be used for the purpose of evaluation only. NICE argues that the specification instead teaches that monitoring can be useful for, *inter alia*, "providing training and assistance to those using such workstations" and "providing an audit trail of significant on-screen events, or can be used as a trigger to initiate other separate events." FN4

FN4. NICE also argues that the term "monitoring" appears only in the preamble of the claims and, thus, describes a "purpose" that cannot serve to limit the scope of the claim. NICE cites to *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1350 (Fed.Cir.1998) as stating that "a preamble usually does not limit the scope of the claim unless the preamble provides antecedents for ensuring claim terms and limits the claim accordingly" and to *Apple Computer, Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 22 (Fed.Cir.2000) in support of this argument.

Although NICE is correct in that use of the term "monitoring" in the preamble does not necessarily limit the scope of the claims, that argument has no relevance to the construction of the term itself. Moreover, NICE appears to overlook the fact that step (c) of claims 1-3 and claim 6 of the '798 and '220 Patents also employ the term "monitoring," in the context of the phrases; "monitoring workstation" and/or "monitoring computer workstation."

The Special Master agrees with the parties; that the term "monitoring" does not need construction. Accordingly, the Special Master adopts the existing claim, language. In so holding, the Special Master is not adopting any of the proffered limitations on the term "monitoring."

### **C. "graphics primitive function call"**

Claim 1(A) of the '798 Patent describes intercepting and interpreting "at least one graphics primitive function call." Similarly, Claim 1(A) of the '220 Patent describes intercepting and interpreting "at least two graphics primitive function calls."

Witness contends that the term "graphics primitive function call" does not need construction. Witness; asserts in the alternative, however, that if the Court finds this term does require construction, it should be construed to mean "a request by a program to draw a basic element for creating images."

Witness asserts; that its proposed construction simply adopts the plain and customary meanings; of "function call" and "graphics primitive," as these terms are understood by one of ordinary skill in the art. In support; of that argument, Witness points to the 1997 edition of the *Microsoft Press Computer* dictionary, which defines "graphics primitive" as "drawing, element, such as a text character, an arc, or a polygon, that is

drawn and manipulated as a single unit and is combined with other primitives to create an image" and "function call" as "[a] program's request for the services of a particular function."

NICE states that it "now agrees" that the term "graphics primitive function call" does not require construction. In the alternative, NICE states that it does not object to Witness's proposed construction, "as long as it is understood that 'graphics primitive function calls' include 'GRE calls,' as described by the specification ('798 Patent col. 12, ln. 50-col. 13, ln. 13), and as acknowledged by Witness [in its Opening Brief at 30]." FN5

FN5. A "GRE call" is a particular type of graphics primitive function call available in the OS/2 operating system.

In response, Witness stated at the September 7 hearing that it does not object to NICE'S suggestion that the term "graphics primitive function call" be construed to encompass GRE calls. Witness stresses, however, that the term should not be limited to GRE calls because a "GRE call" is a type of graphics primitive function call that is available in the OS/2 operating system only.

The Special Master finds that the term "graphics primitive function call" should be construed in accordance with the ordinary and customary meanings of "graphics primitive" and "function call," and agrees that the term should not be limited to GRE calls. Accordingly, the Special Master construes "graphics primitive function call" to mean a request by a program to draw a basic element for creating images. Graphics primitive function calls include, but are not limited to, GRE calls.

#### **D. "*intercepting and interpreting ... to define boundaries*"**

Claim 1(A) of the '798 Patent describes "intercepting and interpreting at least one graphics primitive function call made to said display driver to define boundaries...." Similarly, claim 1(A) of the '220 Patent describes "intercepting and interpreting at least two graphics primitive function calls made to said display driver to define boundaries...."

Witness contends that the phrase "intercepting and interpreting ... to define boundaries" does not need construction. Witness asserts in the alternative, however, that if the Court finds this phrase does require construction, it should be construed to mean "altering the normal invocation of an operation so that in addition to performing the operation, meaning is also attached to that operation for the purpose of defining boundaries."

Witness argues that the specification supports its proposed construction. Specifically, Witness asserts that the specification describes an embodiment wherein Monitor Module 122 intercepts a call by modifying a dispatch table to receive control whenever an application executes the function call. Witness also contends that its proposed construction is consistent with the ordinary meaning of the term "interpret," as understood by one of skill, in the art. In support of that argument, Witness points to the 1996 edition of the *Dictionary of Computing*, which defines "interpretation" as "[t]he process of attaching meaning to expressions."

NICE states in the first instance that the phrase "intercepting and interpreting ... to define boundaries" does not need construction, yet also counters with the following proposed construction:

[T]o capture or hook graphic primitive function calls as they are sent from the graphics engine to determine or' compute previously undefined boundaries of the changed screen region. The boundary of the changed screen region is determined dynamically and is not part of a preexisting set of defined boundary limits or cells.

NICE asserts that its; only objection to Witness's proposed construction is that it fails to acknowledge that the specification uses the terms "intercepting" and "hooking" synonymously. NICE further contends that Witness's expert, Dr. Foley, conceded during his deposition that the patentees used those two terms synonymously.

In response, Witness asserts that it does not dispute that the terms "intercepting" and "hooking" are used synonymously in the patents-in-suit, but states that there are other deficiencies, in NICE'S proposed construction. Witness argues that NICE'S proposal fails to define the "interpreting" portion of the disputed phrase. Witness also contends that NICE'S proposed "as they are sent from the graphics engine" language improperly limits the source of the function calls. Finally, Witness asserts that nothing in the claim requires that the interception and interpretation occur "as" the function calls are sent from the graphics engine.

The Special Master finds partial support for each party's proposed construction. With respect to Witness's construction, the Special Master finds that the proposed "meaning is also attached to that operation" language is consistent with the plain and customary meaning of the term "interpreting," as understood by one of ordinary skill in the art. The Special Master finds, however, that Witness's proposed "altering the normal invocation of an operation" language is vague, ambiguous, and unsupported by the specification.

With respect to NICE'S construction, the Special Master finds that the proposed "to hook" language is supported by the specification, which uses; the terms "intercepting" and "hooking" synonymously. The specification makes clear, however, that "capturing" is distinct from intercepting. The specification describes an embodiment wherein the process of capturing changed regions is a function of Capture Module 120, but the process of intercepting and interpreting graphics primitives is a function of Monitor Module 122.

The Special Master agrees with. Witness that NICE'S proposed construction fails to adequately address the term "interpreting," The: Special Master also agrees with Witness that nothing in the specification or claims suggests that the interception, and interpretation must occur "as" the function calls are sent from the graphics engine. Finally, in accordance with the Special Master's construction of the phrase "determining sequential localized changed screen regions which correspond to at least two sequential screen changes and two actual screen changes" herein, the Special Master rejects the "previously undefined boundaries....not part of a preexisting set of defined boundary limits or cells" language of NICE'S proposed construction.

Accordingly, the Special Master construes the phrase "intercepting and interpreting ... to define boundaries" to mean intercepting (also called "hooking") graphic primitive function calls so that in addition to performing the operation, meaning is also attached to that operation for the purpose of defining boundaries.

***E. "utilizing said boundaries ... to make a copy of said [localized] changed region"***

Claim 1(B) of the '798 Patent describes "utilizing said boundaries of said localized changed region to make a copy of said changed region." Similarly, claim 1(B) of the '220 Patent describes "utilizing said boundaries ... to make a copy of said localized changed screen region."

Witness contends that the phrase "utilizing said boundaries ... to make a copy of said changed screen region" should be construed to mean "to make a copy of a constrained portion of the computer monitor screen containing at least one change to the screen, where such a copy is made by use of the programs that control the allocation and usage of the hardware resources of the computer and provide the foundation on which applications are built."

NICE counters that the phrase means "the step of making a bitmap reproduction of the localized changed screen region by using the boundaries of the localized, changed screen region." NICE contends that the specification supports its proposed construction. Specifically, NICE asserts that the specification refers to "the bitmap of the Changed Region" and that it makes clear that at bitmap reproduction must be "grabbed" from the computer screen. *See* '798 Patent, col. 6, ln. 19-23 & col. 8, ln. 15-30.

The parties' dispute centers on whether the "copy of said changed screen region" must be a bitmap reproduction. NICE argues that Witness's proposed construction improperly attempts to broaden the term "copy" to include "any digital representation of an image that can be used to recreate an image." NICE asserts that, under Witness's proposal, even a command or a graphics primitive could qualify as a "copy." NICE further contends, that, its expert Dr. Bobick rejected Witness's construction as overbroad, and that during his deposition, Witness's expert Dr. Foley was unable to identify any graphics tile formats that could constitute a "copy," other than a bitmap reproduction.

In response, Witness argues that its proposed construction uses neither the term "digital representation" nor the term "command," and that NICE is therefore arguing against a construction that Witness did not propose. Witness further asserts that NICE mischaracterizes Dr. Foley's deposition testimony. Witness does not proffer any additional arguments in support of its proposed construction.

After reviewing the specification, the Special Master finds that the phrases "utilizing said boundaries of said localized changed region to make a copy of said changed region" and "utilizing said boundaries of said localized changed region to make a copy of said localized changed region" should be construed according to their plain meanings. Nothing in the specification indicates that the claimed invention is directed exclusively towards bitmap reproductions or that copies in other graphics file formats are outside the scope of the invention. *See* *Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed.Cir.2002) (holding that claim terms take on their ordinary and accustomed meanings, unless the patentee uses words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope); *see also* *Alloc, Inc. v. ITC*, 342 F.3d 1361, 1370 (Fed.Cir.2003) ("[I]t is impermissible to read the one and only disclosed embodiment into a claim without other indicia that the patentee so intended to limit the invention."). Therefore, the Special Master adopts the existing claim language.

#### **F. "workstation"**

Each of the independent claims of the '798 and '220 Patents contains the term "workstation."

Witness proposes that the term "workstation" means "a position equipped with a computer and optionally a telephone," and that a workstation computer must have an operating system. Witness asserts that its proposed construction adopts the plain meaning of the term "workstation." Witness argues that its proposed construction is consistent with both the *Dictionary of Computing*, which defines "workstation" as a "position for an operator that is equipped with all the facilities required to perform a particular type of task," and the *Call Center Dictionary*, which defines "workstation" as "[i]n the telecom industry ... a computer and

a telephone on a desk and both attached to a telecom outlet on the wall."

Witness also contends that the specification repeatedly uses the term "workstation" to refer to a computer with an operating system. *See, e.g.,* '798 Patent, col. 2, ln. 34-38 ("Generally described, the present invention provides a method of remotely monitoring on-screen activities of a monitored computer workstation, *said* monitored computer workstation having a display screen, *operating system software ...*") (emphasis added); '798 Patent, col. 5, ln. 65-66 (describing Figure 2 as including operating system 100).

In rebuttal, NICE relies on the doctrine of claim differentiation to argue that a workstation does not necessarily have its own operating system. Specifically, NICE contends that a comparison of the preamble of claims 2 and 3 of the '798 Patent to the preamble of claims 2 and 3 of the 220 Patent shows that Witness's proposed construction must be rejected.FN6

FN6. *Compare* '798 Patent, col. 18, ln. 17-20, 34-37 ("A method of monitoring;, on a monitoring workstation, sequential on-screen activities of a monitored computer workstation having a display screen and a telephone extension, said method comprising:") *with* '220 Patent, col. 18, ln. 12-15, 32-35 ("A method of monitoring, on a monitoring workstation, sequential on-screen activities of a monitored computer workstation having a display screen, *its own operating system*, and a telephone extension, said method comprising:") (emphasis added).

The Special Master finds NICE'S claim differentiation argument unpersuasive. "[C]laim differentiation only creates a presumption that each claim in a patent has a different scope; it is not a hard and fast rule of construction." *Kraft Foods, Inc. v. Int'l Trading Co.*, 203 F.3d 1362, 1368 (Fed.Cir.2000) (internal citations omitted). "Moreover, that the claims are presumed to differ in scope does; not mean that every limitation must be distinguished from its counterpart in another claim, but only that at least one limitation must differ." *Id.* As an initial matter, it is questionable whether claim differentiation can be applied to compare claims in two different patents. *See, e.g., Curtiss-Wright*, 438 F.3d at 1380 (stating that claim differentiation applies to claims in "a patent"). More significantly, it is well-established that claim differentiation cannot broaden claims beyond their proper scope. *Id.* at 1381. In this case, any presumption arising from the doctrine of claim differentiation is overcome by the specification, which suggests that the term "workstation," as used in the patents-in-suit, necessarily includes an operating system.

Accordingly, the Special Master construes the term "workstation" to mean a position equipped with a computer and an operating system.

***G. "determining sequential localized changed screen regions which correspond to at least two sequential screen changes" and "localized changed screen region"***

Step (A) of claim 2 of the '798 and '220 Patents describes "determining sequential localized changed screen regions which correspond to at least two sequential screen changes." This limitation will be referred to as the "determining" step. Steps (A) and (B) of claim 1 of the '798 and '220 Patents also contain the phrase "localized changed screen region."

Witness argues that the "determining" step should be construed as "defining constrained portions of the computer monitor screen, each portion associated with and containing one or more screen changes occurring over a period of time." Witness contends that the phrase "localized changed screen region" means

a "constrained portion of the computer monitor screen containing at least one change to the screen." In particular, Witness asserts that: (1) "localized" means constrained or bounded, (2) "changed" means contains one or more screen changes per region, and (3) "screen region" means portion of the computer monitor screen.

Witness contends that the specification supports its proposed construction. In particular, Witness asserts that its proposal is consistent with the method of identifying "localized changed screen regions" depicted in Figures 3a-3c, which the specification describes as "sequential illustrated views showing sequential screen updates of Changed Regions' 302 developed under the present invention."

NICE objects to Witness's proposed construction on the grounds that it fails to address the "which correspond to at least two sequential screen changes" language of Claim 2(A). NICE argues that the two sequential screen changes referenced in Claim 2(A) are crucial to the synchronization that occurs in Claim 2(C). Specifically, NICE contends that the claimed invention requires two screen changes, with each screen change acting as a "book end" that defines the time interval corresponding to the telephone conversation recording. NICE asserts that the two sequential screen changes provide a mechanism for ensuring that the screen changes are played back in synchronism with the recorded audio data. NICE argues that the significance of the "at least two" language is further highlighted by the fact that that language was added to Claim 2(A) during prosecution of the '798 Patent, in order to overcome the examiner's obviousness rejection.

NICE counters that the "determining" step should be construed to mean "determining at least two sequential localized changed screen regions to ensure synchronization of two sequential screen changes; with the corresponding recorded audio data," and that "localized changed screen region" means "a previously undefined area of a screen which includes a visual characteristic of the screen changed from one frames to another and whose boundaries are determined dynamically depending on the screen change."

In support of its proposed construction, NICE argues that the specification is replete with statements indicating that the present invention determines boundaries of changed regions dynamically, and not based on predefined cells or grids. NICE also contends that the Figures of the patents-in-suit illustrate that the boundaries are created "on the fly"-specifically, NICE contends that the boundaries shown in those Figures would be more uniform in size, shape, or location if they were pre-defined.

Additionally, NICE argues that the patents-in-suit cannot cover determination of boundaries using predefined cells or grids because Witness owns another patent, U.S. Patent No. 6,370,574 ("the '574 Patent"), that claims that subject matter. The '574 Patent issued on December 16, 1998, from a continuation-in-part of the application from which the '798 Patent issued. NICE asserts that the new matter contained in the '574 Patent describes a "Multiple Rectangle Technique," in which boundaries of cells are pre-defined using a grid.

In response, Witness makes two primary arguments against NICE's proposed construction. First, with respect to NICE's construction of the "determining" step, Witness objects to the proposed "to ensure synchronization of two sequential screen changes with the corresponding recorded audio data" language, on the grounds that synchronization is irrelevant to the "determining" step at issue. Witness asserts that determining "localized changed screen regions" does not inherently require synchronization with audio, and that synchronization is instead an element of the "playback" operation described in step (C) of the claim. Witness further contends that NICE's expert Dr. Bobick conceded the latter point during his deposition.

Second, Witness argues that NICE'S construction of the term "localized changed screen region" is flawed because the specification indicates that boundaries of changed screen or regions need not be "previously undefined" or "dynamically determined." Witness asserts that the specification describes embodiments wherein the Changed Region is composed of pre-existing "candidate rectangles" that have already been accumulated, but that have not yet been sent to the monitoring station. *See* '798 Patent, col. 11, ln. 67-col. 12, ln. 2.

Witness further states that NICE'S proposed construction of "localized changed screen region" would fail as a practical matter. Witness argues that under NICE'S construction, a change that occurs; in the same screen area twice would not be identified as part of a "changed region" the second time that it occurs, since that region had already been defined previously (during the first occurrence).

Upon reviewing, the intrinsic record, the Special Master finds that the phrase "determining sequential localized changed screen regions; which correspond to at least two sequential screen changes" should be construed to mean determining at least two sequential localized changed screen regions, with each region containing one or more screen changes, and that the phrase "localized changed screen region" means a constrained portion of the computer monitor screen containing at least; one update to a previous screen image.

With respect to the "determining" step, the Special Master finds that the additional limitations that NICE proposes are neither based upon the plain meaning of the claim language nor supported by the specification. Synchronization does not occur until the "playing back" of step (C) and cannot be read into the "determining" of step (A). Moreover, the specification teaches that although the recordation of audio data and the capture of screen change data may happen in any order, the audio data will typically begin recording first. This suggests that the screen changes do not necessarily (or typically) serve as the start and end points for the recording of the audio data.

Additionally, nothing in the intrinsic record suggests that the claimed Invention is limited to methods of determining boundaries of screen regions dynamically, or that methods of determining boundaries of screen regions using pre-defined or pre-existing grids or cells are outside the scope of the claimed invention. Moreover, even if the claims were read to require that the changed screen regions themselves be created "dynamically," it does not necessarily follow that the *boundaries* of those changed regions cannot track a previously defined area. The specification merely indicates that changes to the computer screen dictate the boundaries of the corresponding changed regions. In other words, there is no "changed region" to determine unless a screen change occurs.

Finally, the Special Master is unpersuaded by NICE'S argument that the '574 Patent describes a "Multiple Rectangle Technique" using pre-defined cells and, therefore, the "determining" step of Claim 2(A) of the patents-in-suit cannot be defined to cover title determination of boundaries using pre-defined cells or grids. First, the prosecution history of the '574 Patent is extrinsic evidence that is less significant than intrinsic evidence and cannot vary or contradict the plain meaning of the claim language of the patents-in-suit. *Phillips*, 415 F.3d at 1319; *Interactive Gift Express, Inc. v. CompuServe, Inc.*, 256 F.3d 1323, 1331 (Fed.Cir.2001) (citing *Markman*, 52 F.3d at 981). Second, the claims of the '574 Patent appear to cover new matter other than the "Multiple Rectangle Technique."

With respect to the phrase "localized changed screen region," the parties appear to be in agreement that the

term "changed" means that each "changed screen region" may contain one or more screen changes. The specification expressly defines screen changes as " 'updates' to previous screen images," and "changed regions" as groupings of screen changes.

Accordingly, the Special Master construes "determining sequential localized changed screen regions which correspond to at least two sequential screen changes" to mean "determining at least two sequential localized changed screen regions, with each region containing one or more screen changes," and "localized changed screen region" to mean a constrained portion of the computer monitor screen containing at least one update to a previous screen image.

#### **H. "recording"**

NICE argues that in step (B) of claim 2 of the '798 and '220 Patents, the "recording" of the telephone conversation should be read to mean that as the conversation is recorded, it is logically tied or connected with the screen changes and is stored on the same server as the screen change related data. Witness responds that NICE is seeking to read improper limitations into the claim and that the term "recording" needs no construction.

The Special Master agrees with Witness. The term "recording" needs no construction. It is clear from other claims, such as claims 3(A) and 2(C), that where the patentees sought to add the limitations of storing or synchronization to the claims, they did. In the case of claim 2(B), they did not. The Special Master therefore finds no reason to read those limitations into claim 2(B).

#### **I. "recording data corresponding to audio telephone conversation" and "recording audio telephone conversation and related data"**

NICE notes that claim 2(B) of the '798 and '220 Patents contains the step of recording data corresponding to audio telephone conversation, and that claim 6 adds as an element that the data is recorded on a separate server. From this, NICE argues that because claim 6 adds as an element the storage on a separate server, it must be that the data in claim 2(B) is not stored on a separate server.

The Special Master finds that although this; argument makes sense as a matter of logic, it does not demonstrate that a reasonable construction of claim 2(B) is to import the limitation that the audio data must be stored on the same server as the screen change related data. The Special Master concludes that it is more reasonable to read claim 2(B) as leaving; open the question of where the recorded data is stored, and to read claim 6 as claiming a method wherein the data is stored on a separate server.

#### **J. "playing back said telephone conversation in substantial synchronization with said sequential screen changes substantially as the both happened in real time"**

Step (c) of claim 2 of the '798 patent describes "playing back said telephone conversation recording *in substantial synchronization with* said sequential screen changes *substantially as they both happened in real time*, to allow one at said monitoring workstations to *simultaneously* view on-screen activities and listen to telephone conversations substantially as they occurred at said monitored workstation." (Emphasis added.) Step (c) of claim 3 of the ' 798 patent describes "playing back ... said audio telephone conversation *in substantial synchronization with* sequential screen changes *as they both happened in real time* at said monitored workstation, to allow one at said monitoring workstations to *simultaneously* view on-screen and telephone activities substantially as they occurred at said monitored workstation." (Emphasis added.) Claims

2 and 3 of the '220 Patent describe similar "playing back" steps.FN7

FN7. *See* '220 Patent, col. 18, ln. 22-25 ("playing back said telephone conversation, recording *in substantial synchronization with* said at least two sequential screen changes *substantially as they both happened in real time*, to allow one at said monitoring computer workstation to *simultaneously* view on-screen activities and listen to telephone conversations substantially as they occurred at said monitored computer workstation.") (emphasis added); '220 Patent, col. 18, ln. 45-50 ("playing back ... said audio telephone conversation *in substantial synchronization with* said two actual sequential screen changes as they *both happened in real time* at said monitored workstation, to allow one at said monitoring workstation to *simultaneously* view and hear on-screen and telephone activities substantially as they occurred at said monitored workstation.") (emphasis added).

Witness asserts that the term "simultaneously" should be construed according to its ordinary meaning of "at the same time." Witness contends that the phrases "in substantial synchronization with" and "as they both happened in real time" are interrelated and should be construed together. Witness asserts that those phrases together mean "using time stamping or another mechanism employing a shared clock to substantially represent the original time line of events, in substantially the same way the events originally happened."

In support of its proposed construction of "in substantial synchronization with" and "as they both happened in real time," Witness points to both the; specification and the prosecution history. First, Witness argues that the specification explains that time stamps allow for later replay of the "Changed Region data" in sync with the recorded voice data. *See* '798 Patent, col. 16, ln. 40-43; *id.*, col. 17, ln. 14-16. Witness; asserts that Figure 2 of the patents-in-suit demonstrates how time stamps permit the monitoring workstation to re-create the original timeline of events, through the use of a journal file that collects the time stamp information.

Second, Witness argues that the prosecution history of the '798 Patent suggests; that the patentees intended "not only that the screen and audio data be played back accurately, but also that the original time line be preserved between the two." Specifically, Witness points to an August 6, 1997 Office Action in which the PTO examiner rejected claim 3 of the '765 Application (which issued as claim 2 of the '798 Patent), as anticipated by the McNamara article entitled "Quality Must Be Seen and Heard." Witness asserts that in a telephone interview with title examiner on September 24, 1997, the applicants overcame the McNamara reference by offering to amend application claim 3 to add the phrase "substantially as they both happened in real time," in order to emphasize that the claimed system plays back: sequential screen changes; in synchronism with the recorded telephone conversation. Witness argues that by amending the claim to emphasize "synchronism," the applicants were able to distinguish the McNamara reference because the claimed method allows for the re-creation of a time line for screen and audio data, whereas the system described in the McNamara reference does not.

Additionally, Witness asserts that extrinsic evidence supports its proposed construction. Specifically, Witness points to the definition of "synchronization" in the July 1996 edition *Newton's Telecom Dictionary*, which states in part that "[w]here audio and video are combined, they must be time stamped so that, they can both play back at the same time," Witness argues that one of ordinary skill in the art would recognize that synchronization requires the use of either a time stamp or an analogous clock-based mechanism.

NICE counters that "simultaneously," "in substantial synchronization with," and "as they both happened in real time:" should all be construed to mean that "the recorded audio data is logically tied or connected, to the

at least two sequential screen changes in such a way to ensure that the audio and screen activities are played back in synchronization."

NICE argues that the specification supports its proposed construction. First, NICE asserts that Figure 3 of the patents-in-suit indicates that the voice data and screen data are Logically tied or connected to each other via the "recorded session journal file." NICE points to the portion of the specification describing Figure 3 as an illustration of "the composition of a Journal File 500, which allows for synchronized voice and screen data playback." '798 Patent, col. 3, ln. 6:5-67. NICE also cites the portion of the specification describing a "journal file" as "in essence a script which is played back later." '798 Patent, col. 16, ln. 56-57.

Second, NICE asserts that the statement in the specification that "these activities may be played back much as one would play back the video tape of a television program, that is the on-screen and synchronized voice activities ... that occurred at the monitored workstation may [be] allowed to 'play' at the monitoring workstation substantially as they actually happened..." further supports its proposed construction. *See* '798 Patent, col. 4, ln. 41-47. NICE argues that much like a videotape of a television program contains voice data and screen data that are logically tied to each other in a single medium—namely, the videotape—the recorded session journal file depicted in Figure 5 acts as a medium that logically ties the screen change-related data with the audio telephone conversation-related data. *See* '798 Patent, col. 15, ln. 20-26 ("Video System software ... allows for digital storage of the agent's telephone conversation on the server hard drive for later playback in sync with Changed Region data through use of a scriptlike journal file.")

Additionally, NICE contends that extrinsic evidence further supports its proposed construction. Specifically, NICE points to the definition of "synchronization" in the *Federal Standard Telecom Glossary*, which states in part that synchronization is "[t]he obtaining of a desired fixed relationship among corresponding significant instants of two or more signals...." NICE argues that the term "fixed relationship" in that definition is synonymous to the "logically tied or connected to" language in its own proposed construction. NICE also asserts that Witness's own expert Dr. Foley agreed that synchronization occurs because of "the journal, the log."

The Special Master finds that the phrases "simultaneously," "in substantial synchronization with," and "as; they both happened in real time" should each be construed according to its plain meaning. First, nothing in the specification or the prosecution histories indicates that the "playing back ... in substantial synchronization" step of the claimed invention must be achieved, using either time stamping or another mechanism employing a shared clock. Second, the Special Master agrees with Witness that NICE'S proposed "logically tied or connected to" language; is; ambiguous and is not supported by the intrinsic evidence. Therefore, the Special Master adopts the existing claim language.

**K. "separate server remote from said monitored and said monitoring workstations"**

Dependent claim 6 of the patents-in-suit describes recording screen-related data and audio related-data, "on a separate server remote from said monitored and said monitoring workstations but connected thereby through a network."

NICE proposes that the phrase "separate server remote from said monitored and said monitoring workstations" be construed to mean that "both recorded audio data and changed screen regions are recorded on a single server located at a physically different location distant from the monitoring or monitored workstation." NICE asserts that its proposed construction is consistent with both the ordinary meaning of

"separate" ("set or kept apart" or "standing alone") and the ordinary meaning of "remote" ("not near or immediate" or "located out of the way").

NICE further argues that the specification is consistent with its proposed construction. Specifically, NICE points to Figure 1 of the patents-in-suit, which the specification describes as illustrating "an overall configuration according to the present invention." '798 patent, col. 4, ln. 20-21. NICE asserts that Figure 1 clearly shows a single monitor server that is separate from and at a location physically distinct from either the monitored workstation or the monitoring workstation. *See* '798 Patent, col. 4, ln. 23-26 (describing a configuration that includes "a server, a monitored workstation (a.k.a. an 'agents [sic] workstation'), and a monitoring workstation (a.k.a. a 'supervisor's workstation')").

Witness objects to NICE'S proposed construction, first on the grounds that the plain language of claim 3 (from which claim 6 depends) is completely silent as to not only whether screen changes and audio data are stored in one location, but also whether they are stored in the same physical location. Witness further contends that NICE'S proposed construction is at odds with the specification, which states that configurations different from those of the disclosed embodiments may be used. *See* '798 Patent, col. 15, ln. 27-30 ("The Video System software and hardware is conventional, and different configurations may be used ...").

After reviewing the specification, the Special Master finds that the phrase "on a separate server remote from said monitored and said monitoring workstations" should be construed according to its plain meaning. The Special Master agrees with Witness that nothing in the specification indicates that the screen changes and audio data must: be stored on a single server. Accordingly, the Special Master adopts the existing claim language.

### III. CONCLUSION

For the foregoing reasons, the claims of the '798 and '220 Patents are construed as follows:

monitoring	The term "monitoring" does not need to be construed.
graphics primitive function call	The term "graphics primitive function call" means a request by a program to draw a basic element for creating images. Graphics primitive function calls include, but are not limited to, GRE calls.
intercepting and interpreting ... to define boundaries	The phrase "intercepting and interpreting ... to define boundaries to mean" means intercepting (also called "hooking") graphic primitive function calls so that in addition to performing the operation, meaning is also attached to that operation for the purpose of defining boundaries.
utilizing said boundaries ... to make a copy of said [localized] changed screen region	The phrase "utilizing said boundaries ... to make a copy of said [localized] changed screen region" does not need to be construed.
workstation	The term "workstation" means a position equipped with a computer, an operating system, and optionally a telephone.
determining sequential localized changed screen regions which correspond to at least two sequential screen changes	The phrase "determining sequential localized changed screen regions which correspond to at least two sequential screen changes" means determining at least two sequential localized changed screen regions, with each region containing one or more screen changes.

localized changed screen region	The phrase "localized changed screen region" means a constrained portion of the computer monitor screen containing at least one: update to a previous screen image.
recording	The term "recording" does not need to be construed.
recording data corresponding to audio telephone conversation; recording audio telephone conversation-related data	The phrases "recording data corresponding to audio telephone conversation" and "recording audio telephone conversation-related data" do not need to be construed.
playing back said telephone conversation recording <i>in substantial synchronization with</i> said sequential screen changes <i>substantially as they both happened in real time</i>	The terms "in substantial synchronization with," "substantially," and "as they both happened in real time" do not need to be construed.
separate server remote from said monitored and said monitoring workstations	The phrase "separate server remote from said monitored and said monitoring workstations" does not need to be construed.
separate server remote from said monitored and said monitoring workstations	The phrase "separate server remote from said monitored and said monitoring workstations" does not need to be construed.

N.D.Ga.,2006.

Witness Systems, Inc. v. Nice Systems, Inc.

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