United States District Court,
N.D. California.

GLOBETROTTER SOFTWARE, INC., a California Corporation,
Plaintiff.
v.
ELAN COMPUTER GROUP, INC. a California Corporation, et al,
Defendants.

No. C-98-20419 JF

Oct. 26, 1999.

AND RELATED COUNTERCLAIMS

ORDER FN1 **INTERPRETING** THE '297 PATENT

FN1. This disposition is not designated for publication and may not be cited.

FOGEL**, J.**

On June 10, 1999 the parties argued and submitted their interpretations of U.S. Patent No. 5,390,297 (the " '297 Patent" or the "Patent"). The Patent contains 64 claims, 19 of which are independent, and all of which are contended to be at issue.

Unfortunately, the parties' lengthy, albeit separate "joint statements" reflect some disagreement concerning the nature and extend of the disputes the Court is asked to resolve. After due consideration of the materials presented, the Court has settled upon an interpretation of the '297 Patent as set forth below.

I. The Invention

For purposes of effective communication, it is useful first to set forth a general description of the invention described by the Patent. The description provided in this section is not part of the Court's legal analysis and may not be relied upon as an indicator of the metes and bounds of the invention here at issue. It is intended only to facilitate the reader's ability to conceptualize and understand the interpretation of claims presented in subsequent sections of this order.

The '297 Patent is comprised of both method claims and apparatus claims. The invention teaches how to limit the number of copies of a computer application program which may concurrently run on a network, such that the number of copies running never exceeds the number of licenses purchased from the vender of the application. FN2 Conversely, whenever the number of valid licenses on a network exceeds the number

of copies then in use, the remaining licenses may be used to authorize the running of additional copies at any point on the network.

FN2. For ease of exposition, a form of the word "copy" is sometimes used herein to refer to a copy of an application program existing on a network. Also, the Court is aware that the patent does not purport to limit its utility only to application programs. For conceptual purposes, it is easiest to describe the invention in terms of an application program which a human user attempts to utilize and in so doing triggers the use of the invention here at issue.

From the software vendor's perspective, the invention purportedly is useful because protection of intellectual property no longer depends upon more variable factors such as human integrity or upon more cumbersome technology such as dongles or copy prevention techniques. FN3 The benefit to the administrator of a network is that he or she does not have to deal with the inconvenience of dongles or copy protection technology and yet does not have to purchase more licenses than are likely to be needed at any one time.

FN3. With dongles and copy prevention technology, transferring an available license between different computers requires that a human being physically move something from one computer to another; either the dongle itself or the software storage media, e.g., a floppy disk.

The specification of the Patent discloses two embodiments. In the first, the "license transfer" embodiment, each license occupies an area of memory called a license file and each license file contains at most one license. In this embodiment, a computer user's request to use an application is granted only if the copy the user is trying to run corresponds to a license file which contains a license. If no license is available in the license file corresponding to the copy which the computer user wishes to run, then other license files are searched for an available license. When a license is found, it is transferred to the license file where it is needed.

In the "license pool" embodiment, several licenses may be contained in a single license file. A computer user's request to use a copy of an application is granted only if the pool of licenses in the license file has not been exhausted by other similar requests. Each time a request is made to run an application, a counter is decremented to indicate that one less license is now available.

II. Standards

It is well settled that claim construction is a question of law to be decided by the Court. *See* Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed Cir.1995). When interpreting a claim, the Court must look first to the intrinsic evidence of record: the patent claims, the specification, and, if in evidence, the prosecution history. *See* Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). The words used in the claims and specification generally will be given their ordinary and customary meaning. *See id*. However, the patentee may choose to be his own lexicographer and may use terms in a manner other than their ordinary meaning so long as the special definition is stated clearly in the patent specification or file history. *See id*. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication, and is considered to be "the single best guide to the meaning of a disputed term." *See id*.

In most situations, analysis of the intrinsic evidence will resolve any ambiguity regarding a disputed claim term. *See id*. at 1583. In such circumstances, the Court may not rely on extrinsic evidence. *See id*. However, where the intrinsic evidence is ambiguous as to a disputed term or the scope of the invention, the Court may turn to extrinsic evidence such as dictionaries, expert testimony, prior art, technical treatises and inventor testimony. *See id*. at 1584. Such evidence may be used to help the Court understand the claims, but may not be used to vary or contradict the claim language. *See id*.

III. Construction of the Patent

Several preliminary comments will help to eliminate the need to engage in lengthy repetitive analysis in defining each term. First, most of '297 Patents' 64 claims are, in the terminology of 35 s. U.S.C. 101, "apparatus" claims. FN4 However, several method claims (or "process" claims in the language of s. 101) also are presented. The method claims include claims 18 through 22 and 47 through 54; the balance of the claims are drafted as apparatus claims. The '297 Patent makes heavy use of means-plus-function nomenclature and arguable use of the step-plus-function manner of disclosure. Section 112 para. 6 provides a mechanism by which claim elements may be set forth in terms of function rather than the structure or acts which accomplish the function. In an apparatus claim, "structure" corresponding to the claimed "means for [doing a function]" must be gleaned from the specification. In a method claim, a "step" is set forth in the claims, and the corresponding "acts" comprising that "step" are set forth in the specification.

FN4. The Patent Act is codified at 35 U.S.C. s. 100 et seq., Further references to code sections herein will be to the codification of the Patent Act. For example, reference merely to s. 101, will denote 35 U.S.C. s. 101.

With respect to seemingly parallel method and apparatus claims, FN5 s. 112 para. 6 may operate quite differently in terms of the *extent* to which the specification properly is read to limit the scope of the claimed invention. In interpreting means-plus-function claim language, the first step is to define the function; that is, what does this portion of the apparatus actually do? The Court then determines the structure which performs the disclosed function. It is improper to read so much of the specification into the claim that the function is further defined by the *specification*. According to s. 112 para. 6 the function must completely be ascertained from the *claim*.

FN5. By "parailel method and apparatus claims," the Court is referring to method claims and function claims which appear by their language to describe the same aspect of the claimed invention. In general terms, the method claims describe algorithms and the parallel apparatus claims are couched as programing-which-performs-algorithms. In the Court's opinion, an algorithm (such as a computer program) by its very nature can only usefully be described as a method rather than as an apparatus. To state such a claim in terms of an apparatus is like trying to define a verb as a noun. Historically, software patents have been drafted in this disjointed style to avoid being classified as invalid attempts to patent ideas or mathematical truths. Now that business methods can be patented, the legal fiction requiring algorithms to be patented as machines may be short lived. In the meantime, parallel presentation of claims may result, as here, in incongruously shaped metes and bounds. *Cf*. O.I. Corporation v. Tekmar Company Incorporated, 115 F.3d 1576, 1583-84 (Fed.Cir.1997) (holding that method claims need not be subjected to section 112 para. 6 analysis simply because parallel apparatus claims are properly interpreted as step-plus-function claims).

If the claim discloses "means for doing X," then the function is "doing X." Suppose the Court then turns to the specification which discloses "a computer program which does X by doing x_1, x_2 and x_3." Here, the mechanism disclosed is "a computer program which does X." The further detail that X is accomplished "by doing x_1, x_2, and x_3" is not part of the claim because "doing x_1, x_2 and x_3" constitutes further explication of function which is not detailed in the claim.

In contrast, in step-plus-function terminology a step merely is a portion of a process where the component acts constituting that step are detailed in the specification. The distinction between a step and an act is quantitative. As a result, a means-plus-function claim may involve a structure consisting merely of "a computer program which does X," whereas the parallel step-plus-function claim language may additionally require that the acts of "doing x_1, x_2 and x_3" be incorporated from the specification.

Second, it is the Court's understanding that means-plus-function format generally consists of a "tag," followed by the phrase "means for [doing a function]." Once a given means-plus-function component is introduced, subsequent references to the same structure are traditionally made via the use of the tag followed by the word "means." Once the phrase "license management means for [doing a function]," has been introduced, additional references to "said license management means," allude to the structure previously identified. If "said license management means," is assigned functionality in addition to that which was originally prescribed, then the structure implicated includes the structure identified in the specification as serving the originally identified function in addition to the structure identified as serving the subsequently defined function(s). FN6

FN6. This process of progressively adding additional meaning to a given phrase of the form "said [tag] means," as used in this patent is an obvious result when working within the parameters of a single independent claim and its dependent claims. In the Court's opinion, the process is equally unavoidable in the instant patent when a subsequent, purportedly *independent,* claim (or claim dependent thereon) contains a reference to a previously defined "said" means-plus-function term and purports to expand the functions ascribed thereto. *The Court is in no way endorsing the drafting technique (utilized in* the '297 Patent) *of assigning multiple definitions to the same means-plus-function terminology* such that a proper understanding of the phrase at any given point is dependent upon selecting the correct concentric circle from a Venn diagram of structure and function. Nevertheless, the internal logic of the patent before the Court requires that this awkward means of construction be employed.

Third, the parties' arguments often stray away from claims construction into apparent attempts to lead the Court into a de facto blind infringement analysis. This tendency often is made manifest by one side proposing a definition with a level of detail greater than that which is provided in the claims or required by the specification while the other side requests a construction which explicitly defines the proposed detail out of the invention. A claim should be construed only in the level of detail in which it is set forth or, if in section 112 para. 6 form, then in the level of detail disclosed in the specification.

Finally, the parties each have presented their interpretations of terms in the order that those terms appear in the claims of the Patent. This manner of proceeding suffers from the drawback that many terms must be defined by reference to other terms which have not yet been defined themselves. This obviously makes understanding difficult upon a first reading. Nevertheless, for ease of cross-reference, and to maximize the ultimate utility of this order the Court also will define terms in the order in which the terms appear in the claims. The terms defined herein appear in capital letters wherever they are used in a definition.

A. Claims 1 and 2

Claims 1 and 2 of the Patent reads as follows:

1. A computer network comprising:

a plurality of license storage keys;

a plurality of computers each in association with one of said license storage keys;

means for transferring a license from one of said keys to another of said keys;

means for preventing a program from running on a computer if the key associated with that computer does not contain an available license for that program.

2. The computer network of claim 1 wherein communications between a license storage key and a computer are encrypted.

1. COMPUTER NETWORK

The first disputed term, "COMPUTER NETWORK," is the very object of the first claim and appears only in Claim 1 and in Claim 2 which is dependent upon Claim 1. The first claim provides in pertinent part that it is for "[a] computer network comprising," certain elements. Thus Claim 1 *is* the definition of "computer network." As made clear by the plain language of the claim:

A COMPUTER NETWORK is more than one COMPUTER, more than one LICENSE STORAGE KEY and a means for preventing a program from running on a COMPUTER if the LICENSE STORAGE KEY associated with that COMPUTER contains no available LICENSE for that program.

2. LICENSE STORAGE KEY

The term "license storage key" is not used in the '297 Patent specification, nor is it used other than in the first two claims. Instead, the '297 Patent specification describes "license files, and the other claims of the Patent refer to "license file means ... for storing." The jarring presence in the '297 Patent of the "license storage key" phrase is the result of the wholesale assimilation of the first two claims of the '297 Patent from a competing patent in an interference proceeding. The first two claims in the '297 Patent began their existence as claims 19 and 23 in U.S. Patent Number 4,924,378 (the '378 Patent).

There is no plain meaning in the art for the term "license storage key," and this term does not appear in the '297 Patent except in Claims 1 and 2. Potentially permissible interpretive aids include, in regressing order of immediacy, the claims themselves, the specification of the '297 Patent, the interference proceeding between the application which underlies the '297 Patent and '378 Patent, the claims of the '378 Patent, the specification of the '378 Patent and the prosecution history of the '378 Patent. Plaintiff prefers an interpretation of "license storage key" which it believes is supported by documentation from the interference proceeding, and also certain language quoted from the specification of the '378 Patent.

Plaintiff first cites to the record from the interference proceeding, and in particular to the declaration of

Erwin L. Rehme, one of the inventors listed on the '297 Patent. Rehme defines "license storage key" as a "keyfile which keeps number [sic] of licenses, and temporary files at nodes where program [sic] is run." Plaintiff also cites to a portion of the '378 Patent where "license storage key" explicitly is referred to as "a computer device which essentially contains memory space for storing an indication of how many licenses are available for any given application program and for storing assignments of licenses." ('378 Patent Col.3 Ins. 22-26).

However, a useful interpretation of the disputed term (which is not inconsistent with the portions of the prosecution history just described) can be gleaned from its context within the language of the claims, therefore the Court need not look further. FN7 Specifically, in Claim 1 licenses are alluded to as being transferrable from one license storage key to another. Thus, context indicates that a license storage key must be capable of holding at least one license. We therefore know that a minimum definition of license storage key will include that it must be capable of storing at least one license.

FN7. Indeed, construction which relies upon the language withing the '297 Patent is inherently preferable. Ultimately, Claims 1 and 2 must constitute some sort of meaningful disclosure in the context of the '297 Patent itself if they are to live up to the constitutional justification for their existence i.e., if they are "[t]o promote the progress of science," (U.S. Constitution Article I s. 8 Clause 8).

Further, in Claim 1, computers are said each to be associated with one license storage key (although the reverse relationship is not necessarily implied). Defendants point out that this limitation narrows the potential corresponding structures in the specification to one which is described as a "license file." Defendants argue that the limitations inherent to the "license file" in the specification, including the necessity that it exist in a permanent peripheral storage device (such as a hard disk) and that its contents be limited to specific fields (e.g., expiration dates of licenses) also should be attributed to the definition of "license storage key." In the Court's opinion, the wholesale transfer of limitations from the specification is not warranted where, as here, means-plus-function drafting is not at issue. The Court further declines to define "license storage key" in greater detail than is supported. Consequently, term will be defined as follows:

A LICENSE STORAGE KEY is memory in a device or alternatively a device containing memory, capable of storing at least one LICENSE.

3. COMPUTER

Defendants object to the use of a plain meaning approach to defining computer because of a lack of specificity, pointing to questions which would not be resolved by such a general definition, such as whether a computer necessarily must be "at a workstation." Defendants are correct that a general definition of "computer" does not answer this question or many other specific questions concerning the attributes of computers. Nor does the Patent provide an answer to such questions; nor must this Court. Defendants have pointed to no instance in the specification where the term "computer" is given anything other than its ordinary meaning, notwithstanding references to the specification where the computer in Fig. 1 thereof is described as having a CPU, system memory, and an operating system. None of these attributes constitute a usage of the word "computer" which falls outside the word's normally accepted usage, requiring the Court to adopt the preferred embodiment as an idiosyncratic definition. Nor does it appear so clearly that the drafter was attempting to circumscribe the definition of "computer" with regard to each usage of the word that he

should be perceived to have been exercising his role as a lexicographer.

As explained by the court in *In re Paulsen,* claims construction does not properly involve "a post hoc attempt to redefine the claimed invention by impermissibly incorporating language appearing in the specification into the claims." The *Paulsen* court explains further:

Although "it is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim, ... this is not to be confused with adding an extraneous limitation appearing in the specification, which is improper. By 'extraneous,' we mean a limitation read into a claim from the specification wholly apart from any need to interpret ... particular words or phrases in the claim."

Id. at 1480 *quoting* E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433, (Fed.Cir.1988). Conveniently, the plain meaning definition for "computer" also is found in In re Paulsen, 30 F.3d 1475 (Fed.Cir.1994):

The term "computer" is not associated with any one fixed or rigid meaning, as confirmed by the fact that it is subject to numerous definitions and is used to describe a variety of devices with varying degrees of sophistication and complexity. However, despite the lack of any standard definition for this ubiquitous term, it is commonly understood by those skilled in the art that "at the most fundamental level, a device is a computer if it is capable of carrying out calculations."

Id. at 1480 *quoting* National Advanced Sys., Inc. v. United States, 26 F.3d 1107, 1111-12 (Fed.Cir.1994). The definition of "computer" employed in *In re Paulsen* and *National Advanced Sys., Inc*. is equally appropriate here.

A COMPUTER is a device capable of carrying out calculations.

4. ASSOCIATION

The parties apparently have been unable to agree upon the meaning of the word "association" as used in the phrase "computers each in association with one of said license storage keys," in Claim 1. Defendants maintain that the phrase means each computer must be " 'connected to' an associated peripheral storage device containing one of the license files...." Plaintiff's opt for a straightforward dictionary definition.

The Court has found the dictionary to be a convenient reference tool for discovering the meaning of common English words. Accordingly, reference to *Webster's Ninth New Collegiate Dictionary,* Merriam Webster (1984), yields an appropriate definition for "association" for purposes of construing the '297 Patent. The relevant dictionary entry for association reads "the state of being associated." In turn the pertinent entry for "associate" reads "to join or connect together." It follows directly from the preceding that "association" refers to the state of being joined or connected together.

Additionally, because Claim 2, which is dependent upon Claim 1, adds only that "communications between a license storage key and a computer are encrypted," the Court is of the opinion that association contemplates communication, even in Claim 1. That is, "communications" are referred to in Claim 1 as though they are a pre-existing aspect of the relationship between license storage keys and computers in the computer network with encryption thereby being the only new element of the dependent claim. In light of the above, the following definition is appropriate.

ASSOCIATION is the state of being joined or connected together such that communication is possible as between the joined or connected components.

5. LICENSE

Again, Plaintiff and Defendants split along the lines of common meaning versus how the word is used in the specification of the '297 Patent. As with "computer" and "association," nothing in the specification convinces the Court that the word "license" was used by the inventors in an idiosyncratic fashion requiring deviation from common usage. Here, common usage is not determined by reference to the field of computer science because "license" is a legal term rather than a computer term. Nor however shall the Court turn to any specialized legal reference source; "license" is commonly used in ordinary parlance, and the constitutional purpose of placing Patents in the public domain is not to communicate with lawyers, but to teach a new invention to the world. Consequently, reference to *Webster's Ninth New Collegiate Dictionary* is once again appropriate.

Relevant entries for "license" include "a permission granted by competent authority to engage in ... an activity otherwise unlawful," and also "a document, plate, or tag evidencing a license granted." The salient distinction between the definitions is that the first refers to the abstract concept of permission while the second refers to the physical representation which evidences that permission. Here, there appears to be no dispute that the license at issue must exist in some physical form (e.g., a certain configuration of binary options in digital memory), which could be called "information," and the Court agrees with the parties on that score. The dispute arises over how narrowly the Court should define the type of information which constitutes a license. Plaintiff's position, essentially consistent with the dictionary definition, is that the word means "information representing authorization from a computer application program vendor permitting use of an application program." Defendants argue that the term should be more narrowly limited to mean "license-specific information, including at least the expiration date," claiming that this more limited construction is required by the Patent specification.

Once again, Defendants' importation of limitations from the specification is not justified. The particular embodiment of the license within the specification does not amount to peculiar usage indicating that the drafter of the Patent was acting as his own lexicographer. The license referred to in Fig. 2B of the specification appears to consist of an expiration date, and "in use" indicator and a unique identification number (UID). However, it is apparent that these items of data are utilized in the described embodiment to represent authorization to do that which would otherwise be unauthorized, in other words, the word "license" is used in the specification in its ordinary sense, notwithstanding that usage in the context of a particular embodiment is necessarily limiting.

Further, even Plaintiff's contextual limitation that a license must be "from a computer application vendor for the use of an application program," is unnecessary. This added meaning attempts to pack into the definition of "license," information which is already present in each relevant claim by virtue of other language. For example, Claim 1 refers to "an available license *for that program*."

A LICENSE is information representing authorization.

6. MEANS FOR TRANSFERRING (A LICENSE)

This term, referred to only in Claim 1, is drafted in a means-plus-function format, and therefore it must be

interpreted in light of s. 112 para. 6. FN8 Accordingly, the function first must be ascertained from the claim language, and then the structure corresponding to the identified function must be derived from the specification. Here, the function is identified as "transferring a LICENSE from one of said [license storage] keys to another of said [license storage] keys."

FN8. In other claims, different means-plus-function terms appear to refer to the same or a very similar transfer function. *E.g.,* "Means ... for determining that said license at said other workstation is available at said other workstation," in Claim 25, "*said determining means [also] being effective to transfer* said available license from said other workstation to said selected workstation."

It is clear from the specification that the transfer function is only relevant to the so called "license transfer" embodiment of the invention. In the context of the "license transfer" embodiment, the operation of transferring a license is described in detail beginning at column 11, line 2 of the Patent, corresponding to step-48 shown in Fig. 3 of the Patent. The operation takes several steps which are described between column 11, line 2 and column 11 line 64, culminating with step-62 shown in Fig. 3 of the Patent.

The Court disagrees, however, with Defendants' position that steps 48 through 62 constitute the structure corresponding to the transfer function. If steps 48 through 62 were incorporated into the claim by the means-plus-function language at issue, they would describe *function* at a level of detail not provided in the claim. As explained in the preliminary comments of this Order, function must be fully ascertained from the claim language. The fact that the description provided in steps 48 through 62 of the specification does not refer to structure can be seen even semantically by noting that it is split into "step [s]" rather than, for example "components." The relevant structure is that which is identified in the specification as *doing* steps 48 through 62, namely, the "license manager." (E.g., Patent at 11:2-3.) Meanwhile, the "license manager" is defined in the specification as being "part of each copy of the given computer program that is contained in the computer program file." Patent at 9:34-36. The specification also refers to the "license manager" as a "computer program." Patent at 5:42-43. Thus, the "license manager" is itself a computer program, and is also "part of ... [a] computer program." (This computer program which is part of a computer program, will be referred to herein as a "computer subroutine"). The computer program to which the "license manager" computer subroutine corresponds is any computer program the use of which is restricted by the invention(s) of the '297 Patent based upon the availability of a license.

MEANS FOR TRANSFERRING A LICENSE consists of a computer subroutine which transfers a LICENSE between two LICENSE STORAGE KEYs. One such subroutine corresponds to each computer program, the use of which computer program is restricted by the invention(s) of the '297 Patent. Equivalents of the structure just described also constitute MEANS FOR TRANSFERRING A LICENSE.

7. MEANS FOR PREVENTING (a program from running)

The appropriate analysis here constitutes a trivial departure from the analysis just conducted with regard to the previous term.

MEANS FOR PREVENTING (a program from running) consists of a computer subroutine which prevents a program from running when there is no available license for that program. One such subroutine corresponds to each computer program, the use of which computer program is restricted by the invention(s) of the '297 Patent. Equivalents of the structure just described also constitute MEANS FOR PREVENTING

(a program from running).

B. Claim 3

Claim 3 of the Patent reads as follows:

3. A license management system for limiting the number of copies of a given computer program that are permitted to run simultaneously on one or more nodes of a network in which said nodes are connected, said limiting being according to the number of licenses for said given computer program that are authorized for said network; said system comprising:

license file means on at least one of said nodes for storing at least one of said licenses;

program storage means for storing a copy of said given computer program on each of said nodes at which it is desired to run a copy of said given computer program; and

license management means operatively linked to each said copy, said license management means being responsive to a request from said copy to which it is operatively linked for searching said nodes to locate one of said license file means that has a license that is available for authorizing use at a local one of said nodes at which said requesting copy is stored, said search first being made at said local node and if no such license file means having an available license is located at said local node, said search continuing in seriatim among said nodes other than said local node until one such license file means having an available license is located or until all said nodes have been searched without locating one such license file means having an available license;

said license management means being responsive to the search of all of said nodes without locating one such license file means having an available license for returning to said copy at said local node a message preventing said copy from being run at said local node in response to said request.

1. NODE

Once again, Plaintiff lobbies for the common meaning in the art, and Defendants assert that specialized usage in the specification controls the permissible construction of the word "node." Lengthy analysis is not required for this term because it explicitly is provided in Claim 21 that each node has "a system memory, license memory means for storing ... licenses and directory for identifying said licenses stored in said license memory means for storing licenses." FN9 Further, usage of the term "node" throughout the Patent is consistent with this definition, hence the preference for interpreting a term consistently throughout a Patent is served. It is also apparent from Claim 21, and elsewhere in the Patent that nodes must be points on a network where computer programs may be run.

FN9. Claim 21 is a method claim in which "MEANS FOR STORING LICENSES" is prefaced with the tag "license memory." The only other claims utilizing this tag (claims 22, 44, 46 and 52) are also method claims. The parallel tag in the apparatus claims is "license file," as in "license file MEANS FOR STORING LICENSES." The latter version is seen is claims 3-5, 7-9, 14, 16-17, 55-61 and 63-64. Because "MEANS FOR STORING," however prefaced, refers to a location rather than to acts or steps, its meaning does not vary, and the term therefore is usable as a component part of the definition of "NODE," even though "NODE" itself appears in both method and apparatus claims.

A NODE is a point on a COMPUTER NETWORK where computer programs may be run, and which has a system memory, MEANS FOR STORING LICENSE(s) and a DIRECTORY for identifying the LICENSE(s) stored therein.

2. LICENSE FILE MEANS FOR STORING (at least one LICENSE)

Claim 3 marks the introduction of the means-plus-function term "License file means for storing (at least one License)." The evident function identified by this language is "storing (at least one license)." The corresponding structure in the specification is the "license file." In turn, "license file ... or ... license files" is / are identified in the specification as being "on the [node or] nodes," (e.g. at Col. 6:21-22) and more specifically, as being "on the disk," of the node at issue (e.g. at Col. 8:53; Col. 12:55).FN10 We also know that "[e]ach license file ... that is loaded onto a node is assigned a UID," (Col.7:24-25) which is contained within the license file (e.g. Col. 7: 34-36). Because a UID is assigned to each license file regardless of whether that license file contains any Licenses (*cf.* Col. 7:24-25 with Cols. 11:12-19 and 11:24), the UID assigned to and contained within the license file properly is considered to be a defining characteristic rather than merely a potential content of the license file. Therefore in Claim 3, the disputed term is defined as follows.

FN10. The requirement that license file means be "on a disk," in conjunction with the requirement that a NODE contain License FILE MEANS, implies that a NODE must have a disk. The fact that the definitions of certain terms derived herein imply limitations for other terms defined herein, does not mean that the terms thus limited were insufficiently defined in the first instance. To the contrary, efficiency dictates that the minimum definitions be supplied from which the entire meaning of the Patent ultimately can be extracted.

LICENSE FILE MEANS FOR STORING is an area of memory on the disk of a NODE, capable of storing at least one LICENSE, and containing at least a UID. Equivalents of the structure just described also constitute LICENSE FILE MEANS FOR STORING.

3. PROGRAM STORAGE MEANS (for storing a copy of a computer program)

This means-plus-function term appears once in Claim 3 and once in Claim 55. The structure in the specification corresponding to program storage means, is the "program file," represented as 23A and 23B in Fig. 1 of the specification. From Fig. 1, and the several usages of the phrase "program file" in the specification, it is apparent that it refers to an area of memory on the disk of a node which may contain at least one copy of a computer program, the use of which computer program is restricted by the invention(s) of the '297 Patent.

PROGRAM STORAGE MEANS refers to an area of memory on the disk of a NODE which may contain at least one copy of a computer program, the use of which computer program is restricted by the invention(s) of the '297 Patent. Equivalents of the structure just described also constitute MEANS FOR TRANSFERRING A LICENSE.

4. LICENSE MANAGEMENT MEANS

Reference to "license management means" first appears in Claim 3 and thereafter is repeated in numerous other claims. Unfortunately, this term is not always used in connection with the same function. In Claim 3, reference first is made to "[l]icense management means ... for searching ... nodes ... to locate ... [an available] license." However, in a subsequent element of the same claim, "said license management means,"

is assigned the additional function of "returning ... a message preventing [a] copy [of a computer program] from being run," whenever no available license is found. Thus, in Claim 3, the function which must be accomplished by the license management means is searching nodes for an available license and returning a run-prevention message where no available license is found.

Additional references to "said license file means," are to be construed consistently with the Court's preliminary comments at the beginning of section III of this Order. Thus, in Claim 4, which is dependent upon Claim 3, reference to "license file means" contemplates the structure just defined with the additional limitations of structure which correspond to the functions of comparing UIDs and also determining whether a license is currently in use.

Further references to "said license file means," appear intended to refer to the commutation of structure and function from all preceding claims, whether the preceding claims are presented as independent or dependent. For example, Claim 9, explicitly depends only upon independent Claim 8, which makes no reference to "license file means," or to "said license file means." Nevertheless, Claim 9 includes the following language:

said license management means being effective, in response to determining that said located License file means is valid and that a license in said located license file means is available, for decrementing the number of available licenses in said located [license] file means.

('297 Patent Col. 18:57-63)

In other words, Claim 9 requires that "said license management means," functions to locate a license and to determine its validity and availability. This implies not only adoption of the definition of "license management means" as it stood in Claim 3, (the independent claim immediately preceding Claim 8), but also the adoption of the limitations accumulated by the claims which depend from Claim 3. An internally consistent interpretation of the Patent requires that reference to "said means, [which serve a given function]," designates the addition of new function and structure to means-plus-function terminology introduced earlier in the claims.FN11

FN11. This rule obviously does not apply when the referential "said" is not employed. Therefore, where "license management means," is used without "said" in independent claims 23, 44 and 55, the structure implicated is only that which corresponds to the relevant function(s) in the claim at issue.

In Claim 3, LICENSE MANAGEMENT MEANS consists of a computer subroutine which searches NODES for an available LICENSE, and returns a run-prevention message where no available LICENSE is found. One such subroutine corresponds to each computer program, the use of which computer program is restricted by the invention(s) of the '297 Patent. Equivalents of the structure just described also constitute LICENSE MANAGEMENT MEANS.
Claims 23, 44, and 55 should be construed pursuant to the same methods of construction employed herein with regard to claim 3. Reference to "said LICENSE MANAGEMENT MEANS" performing additional functions incorporates additional structure.

C. Claim 4

Claim 4 of the Patent is as follows:

4. A license management system according to claim 3, further comprising:

means for assigning a unique identification to each of said license file means;

said license management means being effective upon location of any one of said license file means to compare the unique identification of said located license file means to the unique identification assigned to said located license file means by said assigning means to determine whether said located license file means is valid, said license management means being effective in response to a determination that said located license file means is valid for determining whether said license in said located license file means is being used, said license being not available to authorize use of said copy of said given computer program if either said unique identification of said located license file means is invalid or if said license is being used.

1. MEANS FOR ASSIGNING / SYSTEM MEANS FOR ASSIGNING (a UNIQUE IDENTIFICATION to LICENSE FILE MEANS)

This term is in means-plus-function terminology, and thus the proper analysis consists once again of identifying the function and then ascertaining the structure disclosed in the specification as corresponding to that function. The function, clear from the claim language, is "assigning" a unique identification to license file means. As Defendants accurately observe in their separately filed joint statement, the only structure identified in the specification as performing this identification function is simply an operating system. From context it is clear that the "operating system" referred to is the operating system of a computer.

MEANS FOR ASSIGNING (UNIQUE IDENTIFICATION to LICENSE FILE MEANS) is the operating system of a COMPUTER, which operating system assigns a unique identification to each LICENSE FILE MEANS.

2. UNIQUE IDENTIFICATION / UID

Reference is first made to "unique identification" in Claim 3. Elsewhere, the claims refer to a UID, however the parties agree (as does the Court) that the phrase "unique identification" means the same thing in the Patent as the acronym "UID."

Plaintiff appropriately cites to a portion of the specification where the drafter provides a clear and specific definition of UID. At column 6, lines 39-42, we are told that "for ease of expression, the identification assigned to a given license file ... at a given node ... at a particular time is referred to as the UID." The definition is found within the description of the license transfer embodiment; however, it appears also to pertain to the license pool embodiment. Of course, the definition at column 6, lines 39-42 is itself referential and to be fully understood must therefore be read in conjunction with the specification's description of the "identification assigned to a given license file: "[T]he operating system ... assigns an identification to each license file.... In connection with the installation program at the local node, the assigned identification is unique to the license file ... that was stored on the local node at a particular time." (Patent 6 :33-39).

The phrase "installation program" does not appear in the claims, however, and incorporation of this term into the definition of "UID" would start a snowball effect resulting in the incorporation of a great deal of the specification not appropriate to a non-means-plus-function element. A relevant understanding of the term "installation program" for purposes of defining "UID" thus is simply that one exists on each node and it

must be able to distinguish the UID of any license file within its bailiwick from every other license file it may encounter. Therefore, the drafters description of "UID," while specific, merely conforms to plain meaning. That is, a UID must identify each license file such that it will not be confused with any other license file then in existence.

A UID is data assigned to a LICENSE FILE which is different from the data assigned to any other LICENSE FILE then in existence with which the first mentioned LICENSE FILE otherwise may be confused.

D. Claim 5

Claim 5 of the Patent is set forth below:

5. A license management system according to claim 4, wherein:

said license file means includes a license pool capable of storing up to the authorized number of licenses; and

said license management means being effective, in response to determining that said located license file means is valid and that a license in said located license file means is available, for decrementing the number of available licenses in said located file means.

1. LICENSE POOL

Plaintiff's position here is that a license pool is simply a collection of licenses. Defendants, on the other hand, assert that a license pool consists of "information which is contained in the license file shown in Fig. 5B [of the specification], including at least an expiration date ..., a number representing available licences in the pool ..., and the identification of nodes at which licenses are being used...." The two positions are not necessarily inconsistent, although Defendants' definition obviously is more limiting.

In this case, the additional limitations advocated by Defendants are not supported by any clear indication that the drafter was attempting to act as a lexicographer in his use of the term license pool," and thus the Court will adopt a plain meaning interpretation:

A LICENSE POOL is one or more LICENSE(s) collected together, as in a LICENSE FILE.

E. Claims 6-11

With regard to claims 6 through 11, the parties should be able to resolve the disputes identified in their separate "joint statements," by applying the foregoing principles and constructions.

F. Claim 12

The text of Claim 12 is set forth below:

12. A computer that is programmed to perform functions selected to control the operability of computer programs on any of a plurality of workstations coupled together in a network, wherein it is required that a license be available when a request is made to execute a copy of a given one of said computer programs on

a particular one of said workstations, and wherein an aggregate number of said licenses authorized for said network is less than the number of copies of said given computer program that can be executed simultaneously on said workstations of said network, said selected functions comprising:

storing a license file on at least one of said workstations, said license file including at least one of said licenses, the aggregate number of said licenses that are stored being less than the number of copies of said given computer program that can be executed simultaneously on said workstations;

assigning to each said stored license file an identification (UID) that is different from the UID of all other ones of said license files;

in response to a request to execute a copy of said given computer program at a particular one of said workstations, searching said particular workstation to determine whether one of said license files is stored on said particular workstation;

in response to locating said license file on said particular workstation, comparing said UID of said located license file to a system record of the UID for said located license file;

in response to said compared UIDs being the same, determining whether one of said licenses in said located license file is available to authorize execution of a copy of said given computer program at said particular workstation; and

enabling said computer program to be executed on said particular workstation if said license is available.

With regard to this claim, Defendants posit simply that the "selected functions ... are similar to the function portions of the 'means-plus-function' limitations" ' already interpreted and should therefore be interpreted similarly.FN12 Plaintiff takes the contrary position that "[c]laim 12 is different from the preceding claims and is not in step-plus-function format, referring the Court to its claim construction chart. The end result is that it is difficult for the Court to determine with certainty which particular terms in claim 12 will or do give rise to differing interpretations by the parties. The Court believes that the following comments constitute sufficient guidance with respect to the interpretation of this claim.

FN12. Defendants specifically identify Claim 12 as being similar to Claim 8. As mentioned already, the interpretation of Claim 8 is settled by the interpretation of earlier claims.

Each element of this claim should be interpreted according to means-plus-function conventions. Although the traditional "means for ..." terminology is not employed, the apparatus described in Claim 12 is described in terms of function rather than structure. That is, the claim describes "[a] computer that is programmed to perform functions ... said selected functions comprising: [para. the elements of the claim]." Thus, for example, "storing license file on at least one ... workstation" should be interpreted as if the drafter had written "means for storing a license file on at least one workstation." We also know that the license file stored must contain "at least one license." As noted at section III(B)(2) herein, only one structure in the specification corresponds to such a function. Accordingly, the construction supplied earlier for "license file means for storing," is applicable to the first element of Claim 12. The only difference between the first element of Claim 12 and the construction derived for "license file means for storing," is that the function here is slightly narrower, requiring that the storage take place "on a workstation."

"STORING A LICENSE FILE ON AT LEAST ONE WORKSTATION," described by the first element of Claim 12, refers to an area of memory on the disk of at least one workstation capable of storing at least one LICENSE and containing at least a UID. Equivalents of the structure just described also are implicated by "STORING A LICENSE FILE ON AT LEAST ONE WORKSTATION."

The other elements of Claim 12 also should be interpreted according to means-plus-function principles of interpretation.

G. Method Claims and Balance of Apparatus Claims

With regard to apparatus claim terms not addressed above, the parties either have identified no dispute, or the Court has concluded that the guidance provided in the context of other terms should allow the parties to resolve identified disputes.FN13 Claims 18 through 22 and 47 through 54 are method claims, and therefore warrant some additional guidance. However, because the parties' separate joint statements do not identify particular areas of disagreement, (or even draw any distinction between the method and apparatus claims), the guidance provided herein is necessarily provided by way of example. In particular, certain language from Claim 18 is construed below.

FN13. Defendants posit in essence that interpretation of Claims 15 through 64, is wholly dictated by the construction of Claims 1 through 14.

Plaintiff, meanwhile, takes the position that "proper construction of [c]laims 15-64 requires consideration of ... each express term of each claim individually and review of each such term in the context of the other language of the claim." To assist the Court in formidable endeavor, Plaintiff refers the Court to its 196 page "[t]able."

18. A method of controlling the operability of copies of a computer program on any of a plurality of workstations coupled together in a network, wherein it is required that a license be available for each copy of said computer program that is to be executed, and wherein the number of licenses for said computer program that are authorized for said network is limited, said method comprising the steps of:
storing at least one of said licenses in a license file on at least a selected one of said workstations;

assigning to each stored license file an identification (UID) that is different from the UID of all other ones of said license files;

searching said selected workstation in response to a request for execution of a copy of said computer program at said selected workstation to determine whether one of said license files is on said selected workstation;

upon locating said license file on said selected workstation, comparing said UID of said located stored license file to a record of said assigned UID for said located license file; and

if said compared UIDs are the same, and if said license in said license file is available, then enabling said copy of said computer program to be executed at said selected workstation.

1. STEP [of] STORING (a LICENSE in a LICENSE FILE)

The first determination necessary to the proper construction of the term "step [of] storing," is whether step-

plus-function interpretation is warranted. "Method claim elements may begin with the phrase 'steps of' without invoking application of s. 112, para. 6." Seal-Flex, Inc. v. Athletic Track and Court Construction, 172 F.3d 836, 849 (Fed.Cir.1999) (Rader, concurring) (*citing* O.I. Corporation, 115 F.3d at 1583).

In *Seal-Flex,* the court dealt with a claim which referred in its preamble to "steps of ...," and referred in the element under consideration to "spreading an adhesive tack coating for adhering the mat to the foundation...." Seal-Flex, 172 F.3d at 850 (Rader concurring). Judge Rader noted in his concurring opinion that the element was not in step-plus-function form because, despite the expression of an ultimate function ("adhering the mat to the foundation"), it *also* expressed the act necessary to accomplish the function ("spreading an adhesive tack coating"). Judge Rader further explained as follows:

[C]laim elements without express stepplus-function language may nevertheless fall within s. 112, para. 6 if they merely claim the underlying function without recitation of acts for performing that function. Unfortunately, method claim elements often recite phrases susceptible to interpretation as either a function or as an act for performing a function. Both acts and functions are often stated using verbs ending in "ing." For instance, if the method claim element at issue in this case had merely recited the "step of" "spreading an adhesive tack coating," it would not have been clear solely from this hypothetical claim language whether "spreading" was a function or an act. In such circumstances, claim interpretation requires careful analysis of the limitation in the context of the overall claim and the specification.

In general terms, the "underlying function" of a method claim element corresponds to what that element ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish. "Acts," on the other hand, correspond to how the function is accomplished. Therefore, claim interpretation focuses on what the claim limitation accomplishes, i.e., it's underlying function, in relation to what is accomplished by the other limitations and the claim as a whole. If a claim element recites only an underlying function without acts for performing it, then s. 112, para. 6 applies even without express step-plus-function language.

Id. at 849.

Unlike the element at issue in *Seal-Flex,* the predicate language of the first element of Claim 18 contains but a single verb. It is therefore not clear "solely from this ... claim language whether ['storing' is] a function or an act." *Id*. at 849. The first step in resolving whether "storing," is a step or an act is to determine the meaning of the word. In the context of the '297 Patent, "storing" conceivably could refer either to the initial action of *placing* "at least one of said licenses in a license file," or alternatively to the feat of *maintaining* the license(s) in the license file. Reference to earlier use of the word "storing," in Claim 3 is instructive. Specifically, with regard to the term "license file means for storing," the arguments of all parties tacitly rely upon the a definition of "storing" which contemplates the maintenance rather than the initial placement of data. *See* section III(B)(2), herein.

Therefore, if the first element of Claim 18 warrants step-plus-function interpretation, then the relevant function is "[maintaining] at least one of said licenses in a license file." FN14 The Court does not believe that there are any substeps (or acts) described in the specification which may be interpreted to comprise the "step" of "storing." Consequently, if the first element of Claim 18 requires step-plus-function analysis, then Claim 18 is open to a validity attack for failing to disclose an embodiment corresponding to the disclosed function.

FN14. Such a function of course implies the pre-existence of a license file and of at least one license within the license file.

However, maintaining data in a computer file when the computer file has already been created and the data to be maintained already has been deposited does not require explication of component acts. That is, once the function is defined as "maintaining" data it is clear that an act, rather than a step, is at issue.FN15

FN15. In *O.I. Corporation,* the court carefully explained why the trial court's stated reasons for applying step-plus-function analysis were incorrect. The Federal Circuit gave no alternative reasoning however, as to why it ultimately concluded that the word "passing," there at issue, did *not* describe a function. This Court has defined "maintaining" to be an act rather than a step for accomplishing a function. Given that the Court is venturing into largely unmapped territory, it is proper to make explicit the assumption underlying the characterization of "maintaining" as an act. Specifically, the Court believes that the characterization of "act" is appropriate when a person skilled in the relevant art would find the algorithm for performing a function to be virtually dictated by the description of that function. Further, because the "step of" terminology creates no presumption that step-plus-function analysis applies, the Court believes that by default the opposite presumption applies, that is, plain meaning prevails unless the drafter clearly has indicated his intent to act as his own lexicographer.

So far, the Court has concluded that "step of storing a license in a license file," means "maintaining a license in a license file ." The term "license" has already been defined, and the meaning of "license file," is easily deduced from the prior section of this Order to mean "an area of memory on a disk capable of storing at least one license and containing at least a UID."

"STEP OF STORING A LICENSE IN A LICENSE FILE," is maintaining a LICENSE on a disk in an area of memory which is capable of storing at least one LICENSE and which contains at least a UID.FN16

FN16. There are limitations in the first element of Claim 18 in addition to those contained in the phrase here interpreted. For example, the license file at issue must be "on a workstation."

2. STEP OF ASSIGNING (a UID to each LICENSE FILE)

The analysis here is similar to that in the preceding section. The function of the claim is "assigning a UID." As already noted in section III(C)(1), herein, reference to the specification reveals that the assignment of a UID is accomplished by the operating system, however, no description is provided as to how the assignment is accomplished. Because this element is introduced with "step of" rather than "step for," and because there is no indication in the claims or in the specification that "assigning a UID" is truly a "step" in the sense intended by s. 112 para. 6, the Court believes that "assigning a UID" should be given its plain meaning.

"STEP OF ASSIGNING A UID TO EACH LICENSE FILE," refers to the act of specifying a correspondence between each license file and respective UIDs, where "license file" is an area of memory on a disk capable of storing at least one LICENSE." FN17

FN17. The discussion in the preceding section specifies that a license file by definition contains a UID. The

clear meaning of the second element of Claim 18 is that a UID is assigned to a license file which, until that instant, does not contain a UID. By analogy, if the patent were for a house and the definition of "house" was "four walls and a roof," the Court would *not* interpret "step of adding a roof to the house" to mean "the addition of a second roof to a structure already consisting of four walls and a roof." The Court recognizes that this interpretation implies a certain lack of precision on the part of the patent drafter, but is unwilling wholly to abandon common sense and clear meaning in the pursuit of strict consistency.

3. STEP [of] SEARCHING (selected workstation to determine whether it contains a LICENSE FILE)

The interpretation of the third element of Claim 18 is similar to the interpretation of the second element. For the license transfer embodiment, the portion of the specification apparently corresponding to function of searching a particular workstation for a license file describes the following:

[T]he license manager asks whether a license exists on the local node for the given computer program. This question first causes a determination to be made as to whether there is a license file (and thus a license) on the disk at the local node.

Patent at 9:52 to 9:56.

The detailed description of the license pool embodiment is similar:

[T]he license manager in effect asks whether a license pool exists on the local node for the given computer program. This question is answered by first causing a determination to be made as to whether there is a license file (and thus a license pool and a license) on the disk at the local node.

Patent at 13:54-60.

In other words, the '297 Patent does not break into component parts the task of "searching [a] selected workstation [for a] license file[ ]." Nor does the Court perceive (or the parties identify) any other reason for interpreting the language using a step-plus-function mode of analysis or to assign any other than plain meaning to the term at issue.

"STEP OF SEARCHING A SELECTED WORKSTATION FOR A LICENSE FILE," means checking whether a license file is present on the selected workstation, where a "license file" is an area of memory which contains a UID, which is on a disk and which is capable of storing at least one LICENSE.

4. STEP OF COMPARING (UID of stored license file to a record of assigned UID)

The comparing function, specified in the claim as occurring "upon locating said license file on said selected workstation," is described for the license transfer embodiment at 9:68-10:6 and for the license pool embodiment at 13:63-14:1. The comparison is identified in the claim as occurring "upon locating," a license file and the procedure delineated in the specification for ultimately comparing the located to the assigned UIDs consists of several discrete components, the Court therefore concludes that the step of comparing should be interpreted according to the mechanism of s. 112 para. 6. The relevant descriptions provided for the license transfer and pool embodiments are substantially the same, and yield the following construction:

"STEP OF COMPARING THE UID OF STORED LICENSE FILE TO RECORD OF ASSIGNED UID"

refers to 1) asking the operating system for the UID for the license file (area of memory which contains a UID, which is on a disk and which is capable of storing at least one LICENSE) that the operating system caused to be stored in a record in the system memory at the local NODE; 2) decrypting the UID contained in the license file; 3) comparing the UID contained in the license file with the UID returned by the operating system. Equivalents of the process just described also are implicated.

5. STEP OF ENABLING COPY OF COMPUTER PROGRAM TO BE EXECUTED

For both the license transfer and pool embodiments, the pertinent portion of the specification reveal merely that the invention "returns a status to the computer program indicating that it is authorized to run, which enables the computer program to run...." This appears to convey no more information than that which is contained in the claim itself. The fact that the data enabling the computer program copy is called a "status" in the specification does not transform enablement into a step consisting of acts. A plain meaning interpretation is appropriate as set forth below:

"STEP OF ENABLING COPY OF COMPUTER PROGRAM TO BE EXECUTED," refers to making it possible for the copy to run.

N.D.Cal.,1999.
GLOBEtrotter Software, Inc. v. Elan Computer Group, Inc.