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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner

v.

OpenTV, Inc., Patent Owner.

Case IPR2015-00969 Patent 5,884,033

PETITIONER'S REQUEST FOR REHEARING OF INSTITUTION DECISION UNDER 37 C.F.R. § 42.71(d)

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I. INTRODUCTION

Petitioner Apple Inc. ("Apple" or "Petitioner") respectfully requests rehearing under 37 C.F.R. § 42.71(c) and (d) of the Board's decision not to institute *inter partes* review based on U.S. Patent No. 5,696,898 ("Baker '898") and reversal of that decision.

On September 23, 2015, the Board instituted *inter partes* review of claims 1, 2, 15, and 23 of U.S. Patent No. 5,884,033 (the "033 Patent") as anticipated by U.S. Patent No. 5,790,554 ("Pitcher"), and of claim 9 under 35 U.S.C. § 103(a), as obvious over Pitcher. The Board declined to institute *inter partes* review of claims 1, 2, 9, 15, and 23 of the '033 Patent based on Baker '898.

In analyzing Baker '898, the Board made a clearly erroneous finding of fact that the relational database of Baker '898 includes filter entries that are either URLs specifying a location that can be blocked or allowed immediately, or URLs that define a regular expression for pattern matching, but not both. (Institution Decision at 17.) The Board's misapprehension of Baker '898 led to the erroneous conclusion that Baker '898 does not disclose all of the limitations of claim 1 "arranged or combined in the same way as recited" in claim 1. *Net MoneyIN v. Verisign, Inc.*, 545 F.3d. 1359, 1371 (Fed. Cir. 2008). Contrary to the Board's finding, Baker '898 explicitly teaches that the filter tables may include both URLs specifying a location that can be blocked or allowed immediately, and URLs that

define a regular expression upon which a block or allow decision is made after a subsequent keyword or pattern matching operation. (Apple 1003 at 4:11-20, 5:33-36, 39-47; Petition at 33-35; Apple 1010 at ¶ 73-74, 79.) This same erroneous finding of fact led the Board to conclude incorrectly that Apple had not demonstrated a reasonable likelihood that Baker '898 anticipates claims 1, 2 and 15 or that it renders claims 9 and 23 obvious.

II. <u>RELIEF REQUESTED</u>

The Board should institute trial based on the grounds that Baker '898 anticipates claims 1, 2, and 15, and renders obvious claims 9 and 23, in addition to the grounds upon which trial was already instituted with respect to Pitcher. Apple respectfully requests reconsideration of the Board's decision not to institute *inter partes* review of claims 1, 2, 5, 9, and 23 based on Baker '898.

III. STANDARD OF REVIEW

An institution decision by the Board is reviewed for an abuse of discretion. 37 C.F.R. § 42.71(c). An abuse of discretion is evident when a "decision was based on an erroneous conclusion of law or clearly erroneous factual findings, or . . . a clear error of judgment." *PPG Indus. Inc. v. Celanese Polymer Specialties Co. Inc.*, 840 F.2d 1565, 1567 (Fed. Cir. 1988). A request for rehearing "must specifically identify all matters the party believes the Board misapprehended or overlooked." 37 C.F.R. § 42.71(d).

Apple respectfully submits that the Board's decision denying *inter partes* review based on Baker '898 overlooks or misapprehends clear statements in the Baker '898 specification demonstrating that the filter tables may include both URLs specifying a location that can be blocked or allowed immediately, and URLs that define a regular expression upon which a block or allow decision is made after a subsequent keyword or pattern matching operation.

IV. STATEMENT OF FACTS

Baker '898 (Apple 1003) addresses the problem of "restrict[ing] specific system users from accessing information from certain public or otherwise uncontrolled databases (i.e., the WWW and the Internet)." (Apple 1003 at 3:1-3; Petition at 33; Apple 1010 at ¶ 71.) To do so, the invention employs a "relational database," within which "specific resource identifiers (i.e., URLs) are classified as being in a particular access group." (Apple 1003 at 3:4-8; Petition at 33; Apple 1010 at ¶ 71.) Figure 1, reproduced below, illustrates the relational database (114) that "specifies the particular URLs that may be transmitted from a given user terminal to access network resources." (Apple 1003 at 3:59-64, Fig. 1; Petition at 33.)





A message transmitted from a user terminal (e.g., 107, 108, 109) may be immediately and unconditionally allowed if it is directed to a URL matching an entry in the relational database (114):

> For example, upon receipt of a URL from user terminal 107 requesting information from network resource 102, processor 111 would access relational database 114, and thereby determine that URL102 was indeed an allowable request. Following this determination, processor 111 would forward URL102 to public network 100 via firewall 113. Contrastingly, if a URL that is not associated with the requesting terminal identification code within relational database 114 is received by processor 111, that request for information is denied.

(Apple 1003 at 4:11-20; Petition at 33-34; Apple 1010 at ¶ 79.)

Baker '898 contemplates, in addition, that more filter granularity is desirable for some URLs. For example, it states "[t]he URL

http://ourschool/subject/*answer* specifies any resources within the directory http://ourschool.edu/subject (or its tree of subdirectories) that contain "answer" in their names." (Apple 1003 at 5:33-36; Petition at 34; Apple 1010 at ¶¶ 73-74.) To selectively allow access to certain portions of this domain to certain users, the filtering system of Baker '898 also includes the following features:

In order to specify that students be allowed to view "history" resources, but excluded from "history answer" resources, the relational database would store the following with expression rules that would be associated with student identification codes: +http://ourschool.edu/history/*

-http://ourschool.edu/history/*answer*

The notation "+" indicates a grant of access to a resource, and the "-" indicates a restriction.

(Apple 1003 at 5:39-47; Petition at 34-35; Apple 1010 ¶¶ 73-74.) In other words, by specifying the URL in a form including a "regular expression," "typical of UNIX shell languages, wherein '*' represents any string of symbols, including the empty string," (Apple 1003 at 5:30-34), the relational database (114) can specify a further filter condition based on pattern matching. (*See* Apple 1003 at 5:26-28 ("More generally, the URL http://ourschool.edu/history/* is a regular expression that specifies all resources within the directory http://ourschool.edu/history or its tree of subdirectories . . ."); Petition at 34; Apple 1010 ¶ 74.) The listing of URLs in the relational database (114) can be used to match a regular expression: "[s]tandard techniques for determining whether a string of symbols matches a regular expression can be applied to determine whether a particular URL matches a regular expression." (*Id.* at 5:21-24.)

Thus, Baker '898 discloses a system for controlling access to the Internet which has the capability to block or allow a resource entirely on the basis of its URL and to match a particular string of symbols within the URL to selectively allow access to certain portions or subdirectories of an Internet site while blocking access to other portions or subdirectories.

In its Preliminary response, the Patent Owner did not challenge that the system of Baker '898 discloses a system that can block a URL entirely and also selectively allow access to part of an Internet site based on a pattern match, as disclosed in the portions of Baker '898 cited above. Instead, Patent Owner criticized the Petition and the declaration of Dr. Knutson for also citing the "Background of the Invention" section of Baker '898. (Prelim. Resp. at 17.) Patent Owner stated the Background section includes disclosure "describing—and recognizing the fallbacks of—a prior art filtering method that checks Internet 'resource[s] for a list of disallowed words.'" (*Id.*) Patent Owner argued that this disclosure in the "Background" section could not be relied upon because it

describes prior art and not the disclosed invention. (Id.) However, the

"Background" section is part of the disclosure and informs what Baker '898 discloses as the invention. *See Shire Dev., LLC v. Watson Pharms., Inc.*, 787 F.3d 1359, 1365 (Fed. Cir. 2015) (relying on the "Background of the Invention" section for context in interpreting the disclosed invention); *see also VirnetX, Inc. v. Cisco Sys.*, 767 F.3d 1308, 1317 (Fed. Cir. 2014) (relying on the "Background of the Invention" section to derive the primary inventive contributions of the patent). Indeed, the invention of Baker '898 cannot be solely a filtering method that checks for disallowed strings of symbols or words—that is what the prior art discloses. Rather, the system of Baker '898 discloses a system that can both block or allow access to a URL entirely and also match a pattern or regular expression within a URL to determine whether to block or allow access.

V. <u>RATIONALE FOR REHEARING</u>

Apple hereby "specifically identif[ies] all matters the party believes the Board has misapprehended or overlooked." 37 C.F.R. § 42.71(d).

The Board misapprehended the disclosure of Baker '898 as to the contents of the relational database of filters. The Board concluded that the URLs stored in database (114) to block or allow a message from a user terminal and the URLs stored in database (114) that can be matched to a symbol string using UNIX regular expression rules are "alternative configurations for database 114 rather than

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two types of information that are stored together in the database." (Institution Decision at 17.) The Board based this conclusion on a statement from Baker '898 that "[t]he relational database utilized in systems facilitating the invention could also be configured so that the information indicative of allowable resource access is arranged to conform to resources that are configured in a tree structure format." (Apple 1003 at 5:6-10; Institution Decision at 17.) But read in the context of the Baker '898 specification, "resources configured in a tree structure format" is not an alternative way of identifying resources; rather, resources in a tree structure format are partial or wildcard URLs for pattern matching that exist in database (114) along with full URLs. In context, the statement at Baker '898, 5:6-10, relied upon by the Board, means that the relational database processes both URLs having the "tree structure format" and full URLs. Because Baker '898 uses the term "URL" to refer both to resources configured in a tree structured format and full URLs, it would have been understood by one of ordinary skill in that art that both forms of URLs would have been used in the same database to provide enhanced filtering methods over the prior art.

The Board's interpretation of Baker '898 is incorrect for at least two reasons. First, the statement in Baker '898 that "systems facilitating the invention could also be configured so that the information indicative of allowable resource access is arranged to conform to resources that are configured in a tree structure format"

does not mean that URLs describing resources in a "tree structured format" are alternatives to other URLs. Rather, it means that, in addition to full URLs, the disclosed system can also process URLs having the exemplary form "'http://ourschool.edu/history/*,' which specifies all resources within the directory http://ourschool.edu/history or its tree of subdirectories." (Petition at 34; Apple 1010 ¶ 74.) Nowhere does Baker '898 require that every URL in relational database (114) be of the same type or configuration. Figure 1 illustrates that the relational database (114) comprises a table of URLs. And URLs are stated to have both the exemplary form of a "URL associated with [a] particular terminal's identification code" and the exemplary form of a regular expression such as "http://ourschool.edu/history/*," among others. (Apple 1003 at 4:8-10, 5:33-36; Petition at 34; Apple 1010 at ¶¶ 73-74.) The disclosed system of Baker '898 processes both types of expressions to allow or deny access to Internet content. The Board's conclusion that it processes only one or the other, but not both, is unreasonably narrow.

Second, Baker '898 distinguishes over prior art systems that filter only on keywords in a regular expression, illustrating that the invention of Baker '898 must be capable of processing both types of disclosed URLs. *See VirnetX*, 767 F.3d at 1317 (deriving the primary inventive contributions of a patent by examining characteristics of the prior art described in the "Background of the Invention"

section). A relational database table that included only regular expressions for pattern matching would be nothing more than the prior art system Baker '898 distinguishes at column 2, lines 33-40:

In still another method of "filtered" access to WWW resources, the client or proxy server checks each resource for a list of disallowed words (i.e., obscenities; sexual terms, etc.) and shows the user only those resources that are free of those words. However, this method does not permit filtering of images and does not prohibit resources that might be inappropriate due to content other than specific words.

(Apple 1003 at 2:33-40; Apple 1010 at ¶ 81.) To differentiate itself from prior art systems that filter only on "disallowed words," the invention of Baker '898 performs both immediate filtering based a full URL as well as "pattern matching" filtering based on keywords. Indeed, the disclosed system of Baker '898, properly interpreted, *does* address the problem of "filtering of images" and filtering of material objections for reasons of "content other than specific words" precisely because it enables immediate blocking of specific URLs *in conjunction with* the disclosed pattern matching filters.

VI. <u>CONCLUSION</u>

The Board's interpretation of Baker '898 is unreasonably narrow. It is a clearly erroneous finding of fact to conclude that URLs stored in database 114 to block or allow a message from a user terminal and the URLs stored in database

114 that can be matched to a symbol string using UNIX regular expression rules are "alternative configurations for database 114 rather than two types of information that are stored together in the database." This misapprehension of Baker '898 led directly to the Board's decision not to institute *inter partes* review based on Baker '898. Apple respectfully requests reconsideration of the Board's decision not to institute *inter partes* review of claims 1, 2, 9, 15, and 23 of the '033 Patent based on Baker '898.

Respectfully Submitted,

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Date: October 7, 2015

CERTIFICATE OF SERVICE

I hereby certify that on October 7, 2015, I caused a true and correct copy of the foregoing:

• Petitioner's Request for Rehearing of Institution Decision Under 37

C.F.R. §42.71(d)

to be served via electronic mail and Express Mail or an equivalent service on

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October 7, 2015

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