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Paper 9
Date Entered: May 2, 2017

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.,
Petitioner,

v.

ALFONSO CIOFFI, MEGAN ELIZABETH ROZMAN,
MELANIE ANN ROZMAN, AND MORGAN LEE ROZMAN,
Patent Owners.

Case CBM2017-00015
Patent RE43,528

Before JAMESON LEE, BRIAN J. McNAMARA, and
CHRISTOPHER M. KAISER, *Administrative Patent Judges.*

McNAMARA, *Administrative Patent Judge*.

DECISION
Institution of Covered Business Method Patent Review
37 C.F.R. § 42.208

BACKGROUND

Pursuant to 35 U.S. C. § 321 and section 18 of the America Invents Act (AIA), Google, Inc. (Petitioner) filed a Petition, Paper 1 ("Pet."), requesting that the Patent Trial and Appeal Board initiate a covered business method patent review of claims 1, 5, 8, 21–24, 30, 44, 64, and 67 (the "challenged claims") of U.S. Patent RE43,528 (the '528 Patent). Petitioner contends that pursuant to 37 CFR §§ 42.301 and 42.304(a) the '528 Patent meets the definition of a covered business method patent and does not qualify as a technological invention. Pet. 5–16. Petitioner also contends that the challenged claims are unpatentable over the prior art. *Id.* at 29–61.

Alfonso Cioffi, Megan Elizabeth Rozman, Melanie Ann Rozman, and Morgan Lee Rozman (collectively, "Patent Owner") filed a Patent Owner Preliminary Response contesting Petitioner's assertion that the '528 Patent is a CBM patent and the grounds on which Petitioner challenges the patentability of the claims. Paper 5 ("Prelim. Resp.").

The standard for instituting a covered business method patent review is the same as that for a post-grant review. (§ 18(a)(1) of the AIA). For the reasons discussed below, we are not persuaded that Petitioner has demonstrated that the '528 Patent is a CBM patent. Therefore, we do not institute a covered business method patent review.

PENDING LITIGATION

A person may not file a petition under the Transitional Program for Covered Business Method Patents unless the person or the person's real party in interest or privy has been sued for infringement or has been charged

with infringement under that patent. *See* § 18(a)(1)(B) of the Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284, 329 (2011) ("AIA"). Petitioner represents that it has been sued for infringing the '528 Patent in *Cioffi, et al. v. Google Inc.*, 2:13-cv-00103 (E.D. Tex.). Pet. ix.

THE '528 PATENT (EXHIBIT 1001)

The '528 Patent is a reissue patent of U.S. Patent No. 7,484,247. Ex. 1001, 1:14–15. As its title indicates, the '528 Patent discloses a system and method for protecting a computer from malicious software. Figure 1 illustrates a computer system with first and second processors 120 and 140, respectively. As Figure 1 of the '528 Patent shows, both processors 120 and 140 have a direct communication link with second memory 130, but only first processor 120 has a direct communication link with first memory 110. Second processor 140 can access memory 110, as in a multicore system, using processor 120 only with strict user permission through real time interaction or via stored configurations or commands. *Id.* at 10:37–44. Figure 1 shows network interface 190, such as a router or gateway, communicating with second processor 140 and the network. *Id.* at 10:13–18. Decryption keys can be passed between first processor 120 and network interface device 190 via communication link 191. *Id.* at 17:31–33. Figure 1 also shows that user interface 150 provides input to first processor 120 and communicates with video processor 170 via link 151. Video processor 170 communicates with first processor 120 via link 171 and with second processor 140 to provide information to video display 180 and is adapted to combine video data from the first and second processors and transmit it to display terminal 180 for display in a windowed format. *Id.* at 8:31–35.

This architecture is designed to protect memory 110 from malware initiated intrusions and from initiating unwanted processes on first processor 120 by using second processor 140 to isolate first processor 120 and memory 110 from network 195. Ex. 1001, 8:35–39, 10:20–37. The flow diagram in Figure 3 illustrates a basic process in which a user selects data files to download via a browser (step 310) and second processor P2 downloads and writes the data files to second memory M2 (step 320). When first processor P1 is directed to move the data files from memory M2 to first memory M1 (step 330), processor P2 scans for malware in the downloaded data file (step 340). Depending on whether or not malware is detected (step 350), the data file is copied to memory M1 (step 360) or quarantined on memory M2 (step 370) and deleted, cleaned or otherwise quarantined on M2 (step 380). Variations of this process are shown in Figures 4–6 and 10. Figures 7–9 illustrate various processor configurations. For example, Patent Owner notes that Figure 9 shows processor 960 with multiple cores, i.e. first processor core 920 and second processor core 940 and separate isolated memory areas 910 and 930 within a single memory space. Prelim. Resp. 6–7. Processor core 920 can access memory areas 910 and 930 and second processor 940 can access memory area 930 and may be configured to be incapable of initiating access to memory area 910. *Id.* Functions carried out by processors 920 and 940 may be separate logical processes operating on the same processor, but functions carried out by second processor 940 may be configured as unable to access automatically first memory area 910 or second memory area 910 or another logical process performing functions of first processor 920. *Id*. at 7–8 (citing Ex. 1001 16:10–12, 22–31).

ILLUSTRATIVE CLAIM

Claim 1 is illustrative and is reproduced below as it appears in the ’528 Patent, with matter enclosed in heavy brackets **[ ]** appearing in original U.S. Patent No. 7,484,247, but forming no part of the reissue ’528 Patent and matter in italics indicting additions made by reissue.

> 1. A method of operating a computer system *capable of exchanging data across a network of one or more computers and* having at least a first and second electronic data processor capable of executing instructions using a common operating system, comprising **[**the steps of**]**:
>
> executing **[**instructions**]** *a first web browser process, capable of accessing data of a website via the network,* in a first logical process within the common operating system using the first electronic data processor, wherein the first logical process is capable of accessing data contained in a first memory space **[**and a second memory space**]**;
>
> executing **[**instructions**]** *a second web browser process* in a second logical process within the common operating system using the second electronic data processor, wherein the second logical process is capable of accessing data contained in the second memory space **[**, the second logical process being further capable of exchanging data across a network of one or more computers**]**;*and*
>
> displaying**[**, in a windowed format on a display terminal,**]** data from the first logical process and the second logical process, wherein a video processor is adapted to combine data from the first and second logical processes and transmit the combined data to **[**the**]** *a* display **[**terminal**]**;
>
> wherein the computer system is configured such that the second electronic data processor is operating in a protected mode and data residing on the first memory space is protected from corruption by a malware process downloaded from the network and executing as part of the second **[**logical**]** *web browser* process.

ART CITED IN PETITIONER'S CHALLENGES

Petitioner cites the following references in its challenges to patentability:

Reference	Designation	Exhibit No.
S. Ioannidis, S. Bellovin, and J. Smith, "Sub-Operating Systems: A New Approach to Application Security," September 2002	Ioannidis-2002	Ex. 1025
S. Ioannidis and S. Bellovin, "Building a Secure Web Browser," June 2001	Ioannidis-2005	Ex. 1026
M. Lucas, "Absolute OpenBSD: UNIX for the Practical Paranoid," No Starch Press, 2003	Absolute Open BSD	Ex. 1027
G. Lehey, "The Complete FreeBSD: Documentation from the Source," O'Reilly Community Press, Fourth Ed., May 2003 ("Complete FreeBSD")	Complete Free BSD	Ex. 1028

CHALLENGES ASSERTED IN PETITION

Claims	Statutory Basis	Challenge
21–24, 30, 44, 64, and 67	35 U.S.C. § 103	Obvious over Ioannidis-2002 and Ioannidis, individually or together, or in light of Absolute Open BSD and the knowledge of a person of ordinary skill in the art
1, 5, 8	35 U.S.C. § 103	Obvious over Ioannidis-2002 and Ioannidis, individually or together, or in light of Absolute Open BSD and Complete Free BSD and the knowledge of a person of ordinary skill in the art

CLAIM CONSTRUCTION

We interpret the claims of an unexpired patent using the broadest reasonable construction on light of the specification if the patent in which they appear. *See* 37 C.F.R. § 42.100(b). *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). In applying a broadest reasonable construction, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Petitioner and Patent Owner propose similar claim constructions. Patent Owner proposes that following constructions:

"web browser process" – the parties agree that a "web browser process" means a "process that can access data on websites (*e.g.*, direct or indirect)" Prelim. Resp. 15, *see* Pet. 27.

"first memory space" – memory space distinct from a second memory space. The parties agree on this construction. *Id.*.

"second memory space" – memory space distinct from a first memory space. The parties agree on this construction. *Id.*

"the second electronic data processor is operating in a protected mode" – the second electronic data processor is configured such that it is incapable of automatically accessing the first memory space." Prelim. Resp. 15; *see* Pet. 27–28

Patent Owner states that these are the broadest reasonable constructions of the foregoing terms and they are the same as the constructions applied by the district court in the co-pending litigation. *Id.* at 14–15.

We agree that that these constructions are consistent with the Specification of the '528 Patent and, in that context, are the broadest reasonable interpretations of the terms. Therefore, to the extent that claim constructions are relevant to this Decision, we adopt Patent Owner's proposed constructions.

We also address the following claim terms and claim construction issues:

"system file" – Citing the claim construction order entered by the district court in co-pending litigation, Petitioner proposes we construe this

term in claims 21, 44, and 64 to be synonymous with a "critical file" or "critical system file," which refers to files required for the proper operation of the computer's systems. Pet. 27–28 (citing Ex. 1012). Patent Owner does not propose a specific construction. We agree that Petitioner's proposed construction is broadest reasonable interpretation consistent with the specification of the '528 Patent and we adopt it in this proceeding to the extent that claim constructions are relevant to this Decision.

Patent Owner and Petitioner also contend that the preamble of claim 64 is limiting. The preamble of claim 64 recites specific features of the claimed computer program product, e.g., that the stored code is capable of executing instructions using a common operating system having at least one electronic data processor coupled to other elements in a specific way. Thus, we agree that the preamble of claim 64 is limiting.

Petitioner argues that the preamble of claim 44 is also limiting because it provides antecedent basis for further claim recitations. Pet. 28. The preamble of method claim 44 recites structure similar to that discussed above with respect to claim 64 and we agree that the preamble of claim 44 is limiting for similar reasons.

THE '528 PATENT IS NOT DIRECTED TO A FINANCIAL PRODUCT OR SERVICE

A covered business method patent is "a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service." 37 C.F.R. § 42.301(a). None of the claims of the '528 Patent explicitly recites a financial product or service. The Petition argues that the phrase "financial product or service" in the statute is to be interpreted

broadly to encompass patents claiming activities that are financial in nature, incidental to a financial activity, or complementary to a financial activity. Pet. 3. According to the Petition, the claims of the '528 Patent are broad enough to cover a "financial product or service" at least because they "imply using a secure web browser in the specification's Internet banking embodiment, which is indisputably a financial activity." Pet. 4.

The Petition was filed on November 4, 2016. Seventeen days later, on November 21, 2016, the Court of Appeals for the Federal Circuit decided *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 1376 (Fed. Cir. 2016). The Patent Owner Preliminary Response cites *Unwired Planet* in support of its position that "a patent that 'covers' some method and corresponding apparatus does not become a CBM patent because its practice could involve financial activity." Prelim. Resp. 21–22. According to Patent Owner, the claims of the '528 Patent are not financial in nature, but are claims of general utility reciting, among other things, a multi-process browser architecture such that data and system files are protected from malware. *Id.* at 18–19.

Patent Owner filed its Preliminary Response on February 16, 2017. Five days later, on February 21, 2017, the Federal Circuit again addressed the scope of a covered method patent in *Secure Axcess, LLC v. PNC Bank National Assoc.*, 848 F.3d 1370 (Fed. Cir. 2017). On March 24, 2017, we invited the parties to submit briefs directed to the implications of these two decisions on the current proceeding. Paper 6. Each party submitted its brief on April 7, 2017. Paper 7 ("PO Suppl. Brief"); Paper 8 ("Pet. Suppl. Brief").

In their supplemental briefing Petitioner and Patent Owner agree that, in contrast to the arguments advanced in the Petition, *Unwired Planet*

established that the statutory definition of covered business method patent excludes patents claiming activities that are only "incidental to" or "complementary to" financial activity. Pet. Suppl. Brief 1–2; PO Suppl. Brief 1. In *Secure Axcess*, the court stated "Necessarily, the statutory definition of a CBM patent requires that a patent have a claim that contains, however framed, a financial activity element." *Secure Axcess*, 848 F.3d at 1381.

Citing *Secure Access*, *id*., Petitioner emphasizes that the phrasing of a qualifying claim does not require particular talismanic words. Pet. Suppl. Brief 2. Indeed, the court noted that when properly construed in light of the written description, the claim need only require one of a wide range of finance-related activities. *Secure Axcess*, 848 F.3d at 1381. In this case, Petitioner argues that the claims are directed to a financial activity based on unrebutted evidence that the claims cover internet banking discussed in the Specification. Pet. Suppl. Brief 3. Petitioner also argues that, at a minimum, a question of material fact exists on this issue that should be resolved in the preliminary stage in Petitioner's favor. *Id.*

The claims of the '528 Patent recite features that protect a computer from malware. Petitioner states that claim 8 recites a method for exchanging data on a network that is limited to encrypting data in a first process, transferring the encrypted data in a second process and then transferring the encrypted data along a network interface device. *Id.* at 3–4. Petitioner emphasizes that the specification identifies only one use of the encrypted data, i.e., internet banking. *Id*. at 4. According to Petitioner, claim 8 is not directed to data encryption in general, but to a specific method of operating a computer that is used to exchange sensitive financial data with an internet

banking host computer. *Id.* Emphasizing that the statute includes in the definition of a covered business method patent a method that is "used in" a financial activity, Patent Owner contends that at least claim 8 qualifies the '528 Patent as a covered business method patent. *Id.*

Patent Owner concedes that the claims "cover" an internet banking application, but emphasizes that what the claims cover is not the operative inquiry. PO Suppl. Brief 2, 4. Patent Owner argues that the claims must be directed to a financial activity. *Id.* at 2. According to Patent Owner, nothing in the challenged claims is financial in nature, nothing in the challenged claims is explicitly or inherently financial, and nothing in the challenged claims contemplates an exchange of money. *Id.* at 4.

Almost the entire text of the '529 Patent Specification describes a computer architecture that protects against malware intrusions. A few lines of the Specification cited by Petitioner mention that malware is capable of stealing passwords, bank account, and social security information (Ex. 1001, 16:38–41, 17:40–41), that sensitive user interface data can be encrypted (*id*. at 17:3), and that such encryption is useful in an internet banking host computer (*id.* at 17:31). These incidental statements do not change the thrust of the '528 Patent disclosure, which discusses almost exclusively various implementations of the malware protection architecture. The claims of the '528 Patent are not "directed to" a financial activity," as the Federal Circuit has applied that term in *Versata Development Group, Inc. v. SAP America, Inc.*, 793 F.3d 1306 (Fed. Cir. 2015); *Blue Calypso LLC v. Groupon Inc.*, 815 F.3d 1331 (Fed. Cir. 2016); and *SightSound Techs., LLC v. Apple, Inc.*, 809 F.3d 1307 (Fed. Cir. 2015). *See Secure Axcess*, 848 F.3d at 1381. In *Versata,* the court agreed with the Board's determination that the

subject patent claimed methods and products for determining a price, and are considered financial products and services under the statute. *Versata*, 793 F.3d at 1325–1327. In *Blue Calypso* the court found the claims to have an express financial component in the form of a subsidy or financial inducement that encourages consumers to participate in the distribution of advertisements. *Blue Calypso*, 815 F.3d at 1314. In *SightSound* the court found claims requiring the selling of desired video or digital audio signals for a fee through telecommunications lines to be financial in nature. *SightSound*, 809 F.3d at 1311, 1315–16. There is no discussion in the '528 Patent Specification of any method of sale, commerce, advertising or conducting financial transactions that is implemented by the subject malware protection architecture.

We perceive no "issue of material fact" that should be resolved in favor of the Petitioner at the institution stage. Pet. Supp. Brief 3. Although the Petition discusses the construction of several claim terms, none of the proposed interpretations includes any reference to features that are related to internet banking or any other feature that is financial in nature. *See* Pet. 27 (e.g., proposing that "web browser process" be construed as a "process that can access data on websites" in which "this 'access' to website data can be direct or indirect").

In short, none of the claims of the '528 Patent is "directed to" a financial activity on its face, and we do not read any such financial activity into them based on the Specification's assertion that malware protection could be useful in internet banking. Thus, we are not persuaded that the '528 Patent qualifies for covered business method patent review.

SUMMARY

For the reasons discussed above, we are not persuaded that the ’582 Patent qualifies for covered business method patent review.

ORDER

In consideration of the foregoing, it is hereby:

ORDERED that a covered business method patent review of the ’528 Patent is not instituted.

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