IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
MIDLAND/ODESSA DIVISION

VIRTAMOVE CORP., Plaintiff, v. GOOGLE LLC, Defendant.	Civil Action No.: 7:24-cv-00033

GOOGLE'S REPLY CLAIM CONSTRUCTION BRIEF

Google Exhibit 1104
Google v. VirtaMove
Oracle Ex. 1104
Oracle v. VirtaMove, IPR2025-00965

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NOTE ON CITATIONS

- The patents-in-suit, U.S. Patent Nos. 7,519,814 ("the '814 patent") and 7,784,058 ("the '058 patent") are attached as Exhibits A and B, respectively. References to the patents-in-suit are listed by column and line number, or by claim number.
- References to claims in the patents-in-suit are cited by the shortened patent number followed by "cl." and the claim number. For example, "'814 cl. 1" refers to claim 1 of the '814 patent.
- "Br." refers to Google's Opening Claim Construction Brief (Dkt. 63).
- "Resp." refers to VirtaMove's Responsive Claim Construction Brief (Dkt. 65).
- Emphasis in brief added unless otherwise noted.

Contrary to black letter law, VM alternates between asking the Court to ignore the patentee's clear lexicography, apply it despite a lack of objective boundaries, rewrite it to fix real and/or purported problems, or to issue no construction at all despite genuine claim construction disputes. When a definite construction can be ascertained, Google's claim constructions are grounded in the intrinsic evidence as required, and thus should be adopted.

Servers (*'814 cl. 1*): Just as Google's "physical servers" construction provides, VM agrees "the claimed 'servers' are hardware." Resp. 4. Google would agree to this as the construction but maintains that a construction is necessary because VM's contentions point to software as the claimed "server." Br. 4-5. VM's argument that Google's construction excludes virtual machines ***on*** a hardware server is a strawman. Resp. 5-6. Google's construction simply provides what VM concedes, that the servers need to be physical hardware. Whether ***other*** limitations concerning what is ***on*** the hardware can be met by virtual machines is a separate question.

Operating system (*'814 cls. 1, 10; '058 cl. 1*)/ Kernel/operating system kernel (*'814 cl. 1; '058 cl. 1*): VM agrees that the patents use these terms according to their conventional meanings, but disagrees with the conventional meanings Google proposes. Resp. 7-8. That is the dispute that needs to be resolved, particularly given the undisputed importance of line drawing to these terms. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361-63 (Fed. Cir. 2008); Br. 5. Indeed, VM provides no alternative to Google's constructions, much less any hint of what it thinks these terms mean. Instead, VM oddly criticizes Google's definition for providing "context" for the terms. Resp. 8. VM's only argument as to the substance of Google's proposed constructions is that software other than operating systems can "control the allocation and usage of hardware resources such as memory," but VM provides no support for its statement. Nor could it. As VM quotes as to other terms: "[i]t is traditionally the task of an

operating system to provide mechanisms to safely and effectively control access to shared resources," such as hardware memory. '058 1:22-24; Resp. 16.

Disparate computing environments (*'814 cl. 1*): VM agrees the specification's explicit definition of this term requires environments where computers are "stand-alone" or "unrelated." '814 2:17-19. But as VM concedes, "the claim context does not allow for two computers to be 'unrelated' because they must be 'part of a single 'system.'" Resp. 8 ; *see also* Br. 6. And "the claim as a whole ***undisputedly*** cannot extend to 'unrelated' computers." Resp. 9 (emph. in orig.). Given there is no dispute that it is impossible to determine the full metes and bounds of this term using the explicit definition in the specification, and ***VM's*** proposed construction, that should end the inquiry that this term is indefinite. *See* Br. 6-7 (collecting cases).

Yet, VM reasons that as long as a portion of the specification's definition—"standalone computers"—is definite, the entire term must be definite. Resp. 9. But VM provides no authority that the Court can ignore indefiniteness in a patentee's clear lexicography, much less VM's own construction. Doing so would be contrary to black letter law. Br. 6-7 (collecting cases). Because the full scope of "disparate computing environments" is not ascertainable, it is indefinite. *Id.*

Service (*'814 cls. 1, 14*): VM's contention that Google did not identify "any reason for the construction" (Resp. 9) of this term is demonstrably false. As Google explained, and VM does not dispute, "service" is used in a technical sense, not the typical lay meaning of "service." Br. 8. Thus, a construction will be useful, if not necessary, for the jury to apply the proper technical meaning of this term. *Id.* Google also showed VM has not identified what it accuses of infringing this claim limitation, which VM also ignores, thus it is unclear what meaning VM is applying to this term for infringement. *Id.* Its brief is also silent as to what it believes "service"

means in the context of the claims. While VM points to examples from the specification, it contends that "service" is "not limited to" those examples. Resp. 10.

Nor do any of VM's complaints as to Google's proposed construction have merit. For example, the "specialized" software-based functionality language in Google's construction is supported by VM's own argument pointing to services disclosed in the specification such as "Customer Relation Management," "Accounting," and "Inventory," each of which is specialized. Resp. 9-10 (citing '814 Patent at 7:16-51). VM contends the "provided by network servers" in Google's construction is somehow confusing, noting the "claim language recites a specific relationship between servers, containers, applications, and services." Resp. 10. But VM does not explain how Google's proposed construction is in conflict with any of this. Nor could it. Br. 7-8. As to the "comprised of one or more applications" language, VM argues it "confuses the claimed relationship between applications and services" because it is "the container, not the service, that comprises applications." Resp. 10. VM appears to be arguing that since a container has applications, the service cannot also have applications. This makes no sense. The claims recite, as VM concedes, that containers are directed to services. Thus, the containers include the applications needed for that service. There is no contradiction here either.

Container (*'814 cls. 1, 2, 4, 6, 9, 10, 13, 14*): The parties again agree there is a lexicography for this term. Previously, VM included only the first sentence in this lexicography. Br. 8-9. Now, VM has changed its construction to add a third sentence. Resp. 10. To narrow the issues, Google accepts VM's revised, proposed construction: "An aggregate of files required to successfully execute a set of software applications on a computing platform. Each container for use on a server is mutually exclusive of the other containers, such that read/write files within a container cannot be shared with other containers." *Id.*

At least some of the different operating systems/At least some of the plurality of different operating systems (*'814 cl. 1*); Memory accessible to at least some of the servers (*'814 cl. 1*): VM agrees that Google's definition of the word *some* "confirms its plain and ordinary" meaning: "an ***indefinite quantity*** or ***indefinite number*** of people or things." Dkt. 63-7 at 6 (emph. in orig.). While VM emphasizes the "indefinite" language, it ignores that "some of" is used as an indefinite article of "thing**s**," *plural* (not just one), as Google's construction provides.[1] Br. 11.

VM also does not dispute that Google's proposed construction is consistent with VM's characterization of the invention and that VM's interpretation that "some of" could be "one of" ***contradicts*** that characterization. Br. 11-12. Instead, VM argues that is irrelevant because "not every benefit flowing from an invention is a claim limitation" and statements in the specification "touting the benefits of the invention" cannot limit the claim scope unless they "provide a definition or constitute a clear and unmistakable disclaimer." Resp. 13 (citations omitted). But Google is not seeking to read in any "benefits" into the claim, nor is Google asserting a "disclaimer." Google merely pointed out, which VM does not contest, that VM's "one or more" interpretation of "some" eliminates the supposed claimed benefit of the invention that VM itself asserts, in ***addition*** to being inconsistent with the plain meaning of "some" in this context. Nor does VM address that claim 1 separately requires that the container be "for use with a local kernel residing permanently ***on one of*** the servers," showing that the drafters intended "some of" to mean something different than "one of." Br. 12 (collecting cases).

Local kernel residing permanently on one of the servers (*'814 cl. 1*): As Google showed, in the technical sense it is used here, "permanent" storage of data in memory is in contrast to data

[1] The "adjectival sense of" "some" (Resp. 12), which is not used here, is irrelevant.

stored "temporarily," in temporary or volatile memory. Br. 13. VM does not dispute this: "[a]s Google's own evidence shows, a POSITA would generally know the difference between 'permanent' and 'temporary' storage." Resp. 14. Given this admittedly proper context, Google appropriately looked to definitions of what makes storage of data permanent versus temporary in this same context, *e.g.* "nonvolatile memory," "volatile storage," and "volatility," each of which make the distinction as to whether memory persists after power is lost. *Id.* 13. This is not an "attorney-drafted pseudo-definition" (Resp. 13), but comes *directly* from technical dictionary definitions in the indisputably proper technical context of the term at issue. Br. 13. Nor is VM's purported confusion as to whether the memory is a new requirement or what happens when power is removed credible. Resp. 13-14. Obviously, the memory referred to is memory on the server itself, and temporary/volatile memory is lost, while permanent/nonvolatile memory is not, when the server (like any computer) is turned off.

While VM asserts "'[p]ermanent' is a plain and ordinary word used in its plain and ordinary sense," as Google noted, when asked whether permanent meant that the files will always be present on the servers, its plain lay meaning, VM would not agree to that either. Br. 13. Indeed, for all its rhetoric, once again VM provides no hint of what it believes the correct meaning of "permanently" is to a POSITA if not Google's construction, much less what meaning a juror could or should apply without a construction. Thus, there clearly is a dispute here and it should be resolved by adopting Google's construction. *O2 Micro*, 521 F.3d at 1361.

<u>Secure containers of application software (*'814 cl. 1*)</u>: VM concedes that the "patentee defined a 'secure application container' as a particular type of environment, *i.e.*, an environment where application sets have certain relationships" (Resp. 14), just as Google's construction provides from the patentee's admitted lexicography. 2:43-48. Yet, VM argues the lexicography

somehow introduces a "textual inconsistency" between "container" and "environment," such that "environment" should be swapped with "container." Resp. 14-15. But the patentee's lexicography governs. Br. 1, 10 (collecting cases). So to the extent the lexicography is nonsensical, that just would mean the claim is indefinite. *Id.* (collecting cases).

An operating system's root file system (*814 cl. 1*): VM argues "this term only has one possible meaning—it means that the root file system of each container must be different from ***each*** operating system's root file system." Resp. 15. But as Google showed, and VM does not dispute, the claim language does not indicate which "operating systems" are part of the universe in which "each operating system" is to be analyzed. Br. 15. Using VM's example (Resp. 12), what are operating systems A, B, C, D, or E? VM's new proposed alternative construction "each of the containers has a unique root file system that is not the same as ***any*** operating system's root file system" and surrounding argument (Resp. 15-16), does not resolve, but in fact suffers from, the same ambiguity. What is the universe of "***any*** operating systems" to be analyzed?

Critical system elements (*'058 cl. 1*): Google agrees that the specification provides a lexicography for this term, but VM fails to substantively rebut that it fails to provide reasonable certainty as to what is "'normally' supplied by an operating system." Initially, VM notes operating systems "traditionally provide mechanisms to safely and effectively control access to shared resources." Resp. 16. While Google agrees that operating systems control the allocation and usage of resources—hence Google's "operating system" construction that VM inexplicably rejects (Br. 4-5; Resp. 7-8)—operating systems may provide other services as well. But what is "traditionally" or "normally" provided for one operating system may not be "traditionally" provided for another operating system; what is "normal" depends on the operating system, rendering the term subjective and indefinite. Br. 15-16 (collecting cases). For instance, in 2003, a

MacOS would have provided graphical components like menus, windows, and title bars, while other operating systems like Linux would not.

VM further argues that "normal" services are those provided by default in an unmodified operating system in shared libraries. Resp. 16-17. But defining "services 'normally' supplied by an operating system" as "services supplied by an operating system" is a tautology. Claims should not be interpreted to render claim language meaningless. *Merck & Co. v. Teva Pharms. USA, Inc*., 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."). VM's reference to the supposedly conventional/non-conventional ***storage location*** for CSEs (Resp. 17), does nothing to resolve the ambiguity of what it means for CSE to be "normally" provided by an operating system.

As to the "critical to the operation of a software application" language, VM argues this is met when "software designed to rely on these services plainly would not function in its intended manner without them." Resp. 18. But this just begs the question as to what "software" would be evaluated to determine whether it could operate without a particular service. Indeed, while VM points to "TCP/IP, Bluetooth, ATM; or message passing protocols" as examples of services that are "critical" to an application in the specification (Resp. 17-18), not all software requires these purportedly "critical" services. For instance, document viewing and editing software such as Microsoft Word or Adobe Acrobat would work with local files without any network access. Here again, the scope of "critical" would depend on the varying applications that a person of skill might consider or use, rendering the definition subjective and indefinite. Br. 15-16.

<u>Shared library (*'058 cl. 1*)</u>: VM does not dispute that Google's construction follows the patentee's admitted lexicography. '058 6:4-5, 6:49-53. Instead, VM argues that the patentee's lexicography should be rejected for containing "typographical errors," not reflecting the

supposed plain and ordinary meaning of "shared library," and being "confusing." Resp. 18-19. But the "plain and ordinary meaning" is irrelevant as a matter of law given the patentee's lexicography as to this term. Br. 1, 10 (collecting cases). Nor may the Court set aside this lexicography due to supposed typographical errors. Resp. 19-20. A "district court can correct an error only if the error is evident from the face of the patent." *Grp. One, Ltd. v. Hallmark Cards, Inc*., 407 F.3d 1297, 1303 (Fed. Cir. 2005). VM's various hoops are irrelevant as a matter of law as they rely on the provisional application (Resp. 19-20), which is not on "the face of the patent," much less "evident," having not been "corrected" in the 14 years since issuance.[2] *Grp. One*, 407 F.3d at 1304 ("The prosecution history discloses that the missing language was required to be added by the examiner as a condition for issuance, but ***one cannot discern what language is missing simply by reading the patent***. The district court does not have authority to correct the patent in such circumstances."); *see also H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1334 (Fed. Cir. 2014) ("this court has already deemed evidence of error in the prosecution history alone insufficient to allow the district court to correct the error"); *Levitation Arts, Inc. v. Fascinations Toys & Gifts, Inc.*, No. A-07-CA-990-SS, 2008 WL 11334126, at *2-3 (W.D. Tex. Apr. 15, 2008) ("[T]his patent's 'obvious' error has gone unchallenged and uncorrected for some fifteen years. [] Surely a good-faith effort to avoid infringing the patent does not require competitors to delve more deeply into the patent's history than the patent holder!").

<u>Some of the SLCSEs stored in the shared library….are accessible to some of the plurality of software applications / Accessed by one or more of the plurality of software applications it</u>

[2] While irrelevant as a matter of law, VM's suggestion of a mere copy/paste error is not credible. VM provided an entirely new, expanded definition. Nor does VM provide any legal basis why language in the provisional application could somehow control over the language in the specification, which controls as a matter of law. E.g., Br. 1 (collecting cases).

('058 cl. 1): Initially, VM fails to rebut that here too, "some of" in the first phrase is used in the claim language as an indefinite article of things, plural. Br. 17. While VM argues "Google does not even attempt to show intrinsic support for its 'two or more' construction" (Resp. 20), Google showed, and VM again ignores, "SLCSEs stored in the shared library" need to be available to at least two applications in order to be "shared" as the phrase itself requires. Br. 17. Further, VM does not dispute "[a]ccess" is a term of art in computer science, much less explain why it should be read consistent with that meaning for the '814 patent as it agrees, but not the '058 patent, which incorporates the '814 patent specification by reference. Br. 17-18; '058 8:7-11.

Further, VM's proposal that "access" to software applications only requires "use" by those applications ignores that the claim elsewhere recites "***use*** by the plurality of software applications" (1(c)) and "***use*** of a unique instance of a corresponding critical system element," showing "access" and "use" have different meanings in the claim. *Bd. of Regents of the Univ. of Texas Sys. v. BENQ Am. Corp*., 533 F.3d 1362, 1371 (Fed. Cir. 2008) ("Different claim terms are presumed to have different meanings."). Moreover, that the SLCSEs are accessed from the shared library, rather than from the operating system or kernel itself, is a key component of the claimed invention that the specification asserts distinguishes it from the prior art. '058 patent at 7:63-8:3; *see also* Abstract, 1:46-54. VM's apparent reading of this phrase that applications need only indirectly "use" the SLCSEs in the shared library, however, seems intended to remove this key distinction altogether. Indeed, VM explicitly asserts the phrase at issue should somehow encompass "using system calls to access services ***in the operating system kernel***" (cl. 4; *see also* '058 8:46-53) as well as "provid[ing] one of the plurality of software applications access ***to operating system services***" (cl. 9; *see also* '058 8:62-9:13). But the patent is clear that SLCSEs must be in, and accessed from, the shared library, ***not*** the operating system or kernel. Finally,

VM's assertion that "accessing" can be performed "by calling or by running" (*id.*) also proves nothing as code must be read from memory before it can be called or run.

Functional replicas of OSCSEs (*'058 cl. 1*): VM does not dispute that a term of degree is indefinite unless it "provide[s] objective boundaries for those of skill in the art" when read in light of the intrinsic evidence. Br. 19-20 (collecting cases). And it agrees that even its proposed construction for this term, allowing for "***substantial*** functional equivalents of … kernel functions," includes a term of degree. Resp. 22. But, as it cannot (Br. 18-19), VM does not even try to articulate the requisite objective boundaries of "substantial functional equivalents." VM concludes "substantial functional equivalents" is broad, noting that "a replacement or a copy of a kernel function/OSCSE would necessarily also be functionally equivalent." Resp. 23 But VM does not provide any metes and bounds for the "***substantial*** functional equivalents" language in its own construction or the patent's admitted lexicography, which is required when a term of degree is claimed. This alone shows this term is indefinite.

Further, VM takes issue (Resp. 22-23) with Google's reliance on the specification's description of "replica." Br. 19-20 (quoting from the specification that "replica" denotes a CSE having "***similar*** attributes to" a CSE). VM contends that the focus should be on "functional replica" and not just "replica." But "functional replica" is still a "replica," and even VM itself cites the specification's reference to the meaning of "replica" as appropriately considered for this same term. Resp. 23. Thus, VM does not and cannot provide any basis to ignore the patent's explanation that what "replica" means is in reference to what is "similar," much less dispute this too is a term of degree with no objective boundaries. Br. 19-20.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure and Local Rule CV-5, I hereby certify that, on November 26, 2024, I electronically filed the foregoing document using the CM/ECF system, which will send notification of such filing to counsel for all parties of record.

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