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

VIRTAMOVE, CORP., Plaintiff, v. GOOGLE LLC Defendant.	Case No. 7:24-CV-00033-DC-DTG

PLAINTIFF'S SUR-REPLY
CLAIM CONSTRUCTION BRIEF

Google Exhibit 1105
Google v. VirtaMove
Oracle Ex. 1105
Oracle v. VirtaMove, IPR2025-00965

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I. Terms Primarily Appearing in U.S. Patent No. 7,519,814

A. "servers" ('814 claim 1)

Google appears to concede that a physical server running virtual machine software is still a "physical server" as claimed. *Compare* Resp. at 4-6 (characterizing Google's position as "exclud[ing] 'servers that incorporate virtual machine technology'") *with* Reply at 1 ("VM's argument that Google's construction excludes virtual machines ***on*** a hardware server is a strawman."). The parties thus seem to be in agreement, and VirtaMove does not object to Google's "physical server" construction, subject to Google's concession.

B. "operating system" ('814 claims 1, 10; '058 claim 1) "kernel"/"operating system kernel" ('814 claim 1; '058 claim 1)

Google's primary argument for inserting dozens of extraneous words into the claims is "the undisputed importance of line drawing to these terms." Reply at 1. VirtaMove absolutely disagrees that line drawing is important. *See* Resp. at 8. As VirtaMove previously pointed out, Google "does not and cannot identify any dispute regarding the scope of either of these terms." *Id.* That is still the case. *See* Reply at 1-2. *O2 Micro* requires the Court to resolve disputes about *claim scope*; it does not turn claim construction into a mandatory exercise in redundancy. Google's unfounded constructions should be rejected.

C. "disparate computing environments" ('814 claim 1)

Google seeks to create indefiniteness out of the portion of lexicography that undisputedly has no impact on claim scope. In particular, Google asserts that the specification defines "disparate computing environments" as applying to ***either one of*** "standalone" computers or "unrelated" computers, but also admits that "the claim as a whole" ***excludes*** "unrelated computers." Reply at 2. Where, as here, the "source of indefiniteness that [defendant] complains of… plays no discernable role in defining the scope of the claims," there can be no finding of indefiniteness,

because "the dispositive question in an indefiniteness inquiry is whether the '***claims***,' not particular claim ***terms***," are indefinite. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1229, 1231 (Fed. Cir. 2016) (emphases added). Google does not even allege in its Reply that the ***claim as a whole*** is indefinite, but rather improperly focuses on "particular claim ***terms***," contrary to binding Federal Circuit authority. *Id.* Because Google does not even attempt to show that the claim ***as a whole*** lacks reasonably discernable claim scope, Google's indefiniteness challenge fails.[1]

D. "service" ('814 claims 1, 14)

Google's proposal for this term is again an exercise in unnecessary redundancy. There is no lexicography or disclaimer. Google at least attempts to explain a dispute with VirtaMove regarding claim scope, but the abstractness of Google's arguments merely confirms that there is nothing here that requires construction.

For example, Google states that "Customer Relation Management," "Accounting," and "Inventory" services are all "specialized" services, which purportedly supports including that word in the construction. Reply at 3. But it is difficult to imagine what sort of service would *not* be specialized under Google's understanding. If "specialized" does not actually limit the claim scope, then there is no disagreement between the parties.

Regarding the "comprised of" phrase: The claims require the claimed applications to be "related to a service." Assuming that Google is using "comprised of" to mean "comprising," then under Google's proposal the applications must be related to a service that in turn comprises applications. The added limitation is redundant at best. For example, if the service is "Inventory" (*see* '814 Patent at 7:20-21) and the application is the MySQL database application (*see id.* at 4:26-

[1] Because both parties agree that *in the context of the asserted claims*, "disparate computing environments" would not extend to "unrelated computers," if the Court construes this term, the "or unrelated" language could be excised from VirtaMove's proposed construction.

31), Google requires that the MySQL application relates to the inventory application, which comprises the MySQL application. Surely the last limitation will always be satisfied; if there is an application related to a service, then the service must comprise at least that application. Google's inserted language thus does not change the claim scope, but it does make the claim significantly more confusing.

Google also provides no actual legal basis for including its made-up language. Google's unsupported and redundant proposal should be rejected.

E. "container" ('814 claims 1, 2, 4, 6, 9, 10, 13, 14)

VirtaMove and Google agree on the construction of "container" as "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."

This term is also at issue in the co-pending action before the Court involving Amazon, Case No. 7:24-cv-30-ADA-DTG. VirtaMove has requested that the Court enter a single construction in both cases, but in any event VirtaMove will abide by its compromise agreement with Google in this case.

F. "at least some of the different operating systems/at least some of the plurality of different operating systems" ('814 claim 1)
"memory accessible to at least some of the servers" ('814 claim 1)

Google's attempt to redefine "some" as "two or more" (contrary to basic LSAT knowledge,[2] for those who still remember the struggles of logical reasoning preparation) is not credible, particularly in view of Google's own extrinsic evidence defining "some" as "***one*** *or several* ***of*** a number of unspecified alternatives." Dkt. 63-7 at 6. Google attempts to hide this issue

[2] *See* https://testmaxprep.com/blog/lsat/lsat-prep-concepts-the-basics-of-some ("'some' means 'at least one'").

in a footnote, disregarding the definition with the conclusory assertion that the "adjectival sense" of "some" is "irrelevant." Reply at 4 n.1. But Google cannot plausibly suggest that "some" means "one or more" when used as an adjective and "two or more" when used as a pronoun," and Google certainly cites no evidence for that assertion.[3]

With Google's own extrinsic evidence cutting against Google's "plain meaning" argument, Google cannot prevail, because Google does not even attempt to show that disclaimer or lexicography applies. Resp. at 12-13 (VirtaMove explaining there is no lexicography or disclaimer); Reply at 4 (still identifying no lexicography or disclaimer); *Provisur Techs., Inc. v. Weber, Inc.*, No. 2021-1851, 2022 WL 17688071, at *3 (Fed. Cir. Dec. 15, 2022) (specification's discussions of inventive benefits not limiting absent "a clear and unmistakable disclaimer").

G. "local kernel residing permanently on one of the servers" ('814 cl. 1)

Google admits that there is no substantial dispute between the parties as to what "residing permanently" means in this context: stored in nonvolatile memory rather than volatile memory. Reply at 5. Google identifies no lexicography or disclaimer, or indeed any intrinsic or extrinsic evidence other than dictionary definitions, that requires inserting its verbiage about power loss and "the one of the server's memory." As to "one of the server's memory," Google now admits that this is "memory on the server itself," which is not otherwise claimed. Reply at 5. It is not the same as the claimed "memory accessible to at least some of the servers," which need not be "on" the server itself. *See* '814 Patent at 9:36-39, 14:33-35 (describing memory accessible over a network). Google gives no explanation why a new structural limitation should be added.

[3] VirtaMove could not have foreseen Google making an argument that "some" encompasses different numbers based on its part of speech, and common definitional resources directly refute that argument. *See, e.g.*, https://www.merriam-webster.com/dictionary/some (defining the *pronoun* "some" as meaning "one indeterminate quantity, portion, or number as distinguished from the rest," and noting that it can be "*singular* or plural in construction").

H. "secure containers of application software" ('814 claim 1)

Google's suggestion that its own proposed construction would render the claim indefinite hardly supports its position. Reply at 6 ("[T]o the extent the lexicography is nonsensical, that just would mean the claim is indefinite."). To be clear, there is no suggestion that this proposal is "nonsensical" or would be indefinite; rather, Google's construction makes the claim unnecessarily confusing by removing the word "container," which forms the antecedent basis for other terms—and which the parties have already agreed to construe. *Supra* Section I.E; *see* Resp. at 14. The proposal also inappropriately attempts to expand the claim scope. The patentee claimed a species of environment, *i.e.* "containers"; it did not claim the entire genus, "environments." *See* Resp. at 14-15. There is no reason to read out the claim term "container," from "secure containers of application software."

I. "an operating system's root file system" ('814 claim 1)

Google asks: "What is the universe of '***any*** operating systems' to be analyzed?" Reply at 6. The answer is literally ***any*** operating system's root file system. Context is key: this phrase appears within the requirement that each container "has a unique root file system that is different from an operating system's root file system." The point of the claim is that each claimed container will have its own root file system, rather than sharing a root file system with *any* operating system's root file system. If a container shared its root file system with even one operating system, then it would not be unique.

The only other plausible answer to Google's "what is the universe" question would be that only the *relevant* operating system(s) matter; the container's root files system must be different from the root file system of the operating system on the server(s) with which the container is compatible (i.e., the "relevant operating system"). But logically, there is not a distinction between being different from ***the relevant*** operating system's root file system and being different from

every operating system's root file system, because the claim also requires that the container's root file system be *unique*. Realistically if a container on a particular server does not share a root file system with the OS *on that server*, it will not share a root file system with ***any*** operating system (in the entire world).

By way of analogy, if one were to open a business in Waco that is on a street "different from Washington Avenue" in the relevant city (Waco), then it will by definition also be on a street "different from" ***any*** "Washington Avenue" (including the "Washington Avenues" in Dallas, Houston, and New Braunfels). Likewise, if a container running on "Server A" has a root file system different than the root file system used by "Server A's" operating system, then that container will not have a root file system that is the same as ***any*** operating system's root file system.

Tellingly, neither Amazon nor Amazon's expert has alleged this term to be indefinite in co-pending litigation. *VirtaMove v. Amazon*, Case No. 7:24-cv-00030-ADA-DTG, Dkt. 71, 79. The purported inability of Google's lawyers to ascertain the scope of this straightforward claim term is certainly not clear and convincing evidence of indefiniteness.

II. U.S. Patent No. 7,784,058

A. "critical system elements" (claim 1)

Google's attorney argument, unsupported by either intrinsic or extrinsic evidence, cannot support its burden to establish indefiniteness by clear and convincing evidence. The '058 patent specification contains extensive discussion and description of critical system elements; the term, along with its abbreviation "CSE," appears over a hundred times in the patent, including in the description and illustrations of prior art systems.

Google takes a divide-and-conquer approach to indefiniteness, separately criticizing the "normally" and "critical" concepts described in the patent specification. Reply at 6-7. Both attacks

fail. As to "normally," VirtaMove explained in its responsive brief that the specification and claim context confirm that this is a reference, not to prior art operating systems in general, but to the "normal" operation of the actual operating system as claimed, *e.g.* the operating system within an embodiment of the claimed invention. *See* Resp. at 16-17. For example, limitation 1(b) of claim 1 requires "an operating system having an operating system kernel having OS critical system elements (OSCSEs)," corresponding to the CSEs "normally" found in the operating system. This is in distinction to the inventive concept of a CSE "replicated from kernel mode, into user mode" within a shared library, as claimed in limitation 1(c). *Id*.

Google gives no response to VirtaMove's explanation, instead reiterating its insistence that the scope of the term must somehow be measured with respect to whether specific functionalities were provided in 2003 vintage operating systems. Reply at 6-7. There is simply no suggestion in the specification that a POSITA would have looked to survey the history of OSes to determine whether a particular element is "normally provided," as opposed to the far more straightforward approach of simply looking to what is included in the operating system at issue. The reason that the specification describes CSEs as "traditionally" being provided by an operating system is that traditional systems do not ***also*** provide a replica of the CSE in user mode within a shared library, as recited in limitation 1(c).

As to "critical," Google insists that a CSE must be critical to "all software," and that if a CSE is not critical to "Microsoft Word or Adobe Acrobat," it cannot be "critical." Reply at 7. Again, this speculation finds no support in the intrinsic or extrinsic evidentiary record. The patent specification expressly defines a CSE as "critical to the operation of *a* software application," not "all" applications and not some narrow class of applications. There is no reason to look to "the

varying applications that a person of skill might consider or use," and thus no basis for indefiniteness.

B. "shared library" (claim 1)

In the parallel case involving Amazon, the parties have agreed to construe this term as "An application library whose code space is shared among all user mode applications." The same construction should be adopted here.

Google's argument against that reasonable interpretation relies on a trio of cases involving serious printing errors in the claim language itself. In *Group One, Ltd. v. Hallmark Cards, Inc.*, 407 F.3d 1297, 1302 (Fed. Cir. 2005), the Patent Office had completely and inexplicably omitted an entire limitation from the claim itself. Because of the nature of the error, "one cannot discern what language is missing simply by reading the patent"; in other words, there was no hint in the patent itself that something was awry. *Id.* at 1303; *see also H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1334 (Fed. Cir. 2014) (considering essentially the same fact pattern and citing *Group One*); *Levitation Arts, Inc. v. Fascinations Toys & Gifts, Inc.*, No. A-07-CA-990-SS, 2008 WL 11334126, at *2 (W.D. Tex. Apr. 15, 2008) (same).

Here, however, the claim language is not erroneous. VirtaMove is not asking the Court to correct the claim language; VirtaMove is asking the Court to refrain from inserting an obviously erroneous and confusing construction into the claims. Google cites no authority requiring typographical or other obvious errors in the specification to be imported into the claims. Unlike the "missing-limitation" line of cases, a POSITA reading the purported lexicography carefully would readily understand that a shared library *has* a code space, and that the statement that a shared library *is* a code space is erroneous, for the reasons set out in VirtaMove's opening brief.

C. "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" ('058 cl. 1)

Google's attempt to interpret "some" contrary to its plain meaning should be rejected for the same reasons discussed in Section I.F, above.

Next, Google's argument that "use" does not constitute "access" in the context of the claims at issue here is contradicted by Google's own briefing, in which Google acknowledges that "accessing" a software element constitutes at least "indirectly" using that software element. Reply at 9. Accordingly, both parties agree that the plain meaning of "accessible" means "usable" in this context, and in the absence of disclaimer or lexicography (which Google does not attempt to show), this plain meaning controls. This is also common sense; for example, one can *access* functionality of Google's servers without directly *reading from the code that implements* Google's servers (which happens every time one logs into his or her Gmail account).

Google also does not dispute that the specification makes clear that "'accessing' can be performed 'by calling or running'" (i.e., using). Reply at 9-10. Google contends that this "proves nothing as code must be read from memory before it can be called or run (*id.*), but this ignores ***what entity*** must read the code that is being called. For example, a software application may make a function call (which will cause at least some component of the system to read code associated with that function), but the software application ***itself*** does not need to read the code associated with the function. Instead, some software (other than the software application making the function call) may read the code associated with the function, even though the software application is using the function by calling it and deriving benefits from it. Google provides no evidence to the contrary. Again, the Gmail example is instructive; a user's computer cannot send an email to another email account via Gmail without ***some*** component reading code that implements the "send" functionality, but the ***user's computer*** does not need to read that code in order for the user's

computer to access that functionality. Instead, it could be Gmail's server reading the code and actually executing the "send" functionality, even though the user's computer is accessing that functionality.

D. "functional replicas of OSCSEs" (claim 1)

Google's assertion that "substantial functional equivalents" fails to provide "any metes and bounds" for the claim scope is conclusory and incorrect. Reply at 10. Juries are routinely called on to evaluate whether a product performs "substantially the same function" a claim element—*i.e.*, whether the product includes the substantial functional equivalents of a claim element. Resp. at 23. Google cannot realistically contend that this term is indefinite to a POSITA when it invokes the exact same type of evaluation that juries routinely perform.

Google also insists that the term "replica" itself has lexicography encompassing merely "similar" CSEs, and that "functional replica" therefore must also be defined "in reference to what is 'similar.'" Reply at 10. Google's argument expressly ignores the actual claim language and context (which makes clear that similarity is to be evaluated in the context of ***functionality***, not merely "similarity" along any conceivable metric) and thus fails. As VirtaMove has explained and Google does not dispute, the claim's metes and bounds are limited to "substantial functional equivalents," which is narrower than similarity of ***any*** conceivable sort (e.g., similar in file size, or similar in type of programming language used).

In a Notice of Supplemental Authority, Dkt. No. 69, Google asserts that *Jawbone Innovations, LLC v. Meta Platforms, Inc.*, Case No. 23-CV-00158-ADA, Dkt. 104 (W.D. Tex. November 24, 2024) is relevant to this term, because of its "holding that the terms 'similar' and 'substantial' are indefinite terms of degree." *Jawbone* is inapposite. The court there considered, in relevant part, the pairs of terms "substantially similar [responses to noise]" and "substantially

dissimilar [responses to speech]." *Id.* 35-37. The court noted that the patent specifications did not clarify the meaning of these terms, because they simply "mirror the claim language" and provide "no further guidance regarding the scope of these terms." *Id.* at 31-32. In fact, the specifications used the words similar and dissimilar with a range of different accompanying adverbs, including "substantially similar," "very similar," and "approximately similar," which the court presumed would mean different things; the court found that these contrasting formulations would "make it more difficult for a POSITA to determine what term, if any, the disclosures in the specification are directed towards." *Id.* at 32. The court rejected the argument that the specification's recitation of specific parameters for "good performance" was sufficiently tied to the claim language. *Id.* at 33.

None of the circumstances of *Jawbone* are present here. The patent does not claim ***all*** similarity; rather, "functional replicas of OSCSEs" encompasses, at the broadest, only "substantial functional equivalents." *See* Resp. at 23; Reply at 10. There is also no confusion between, say, "substantial functional equivalents" vs. "approximate functional equivalents," as was the case in *Jawbone*. Rather, "substantial functional equivalents" is the only phrase that a POSITA need evaluate to determine claim scope, and as discussed above this refers to a scope that factfinders can readily evaluate.

In short, Google presents no apposite authority or argument that VirtaMove's proposed construction "substantial functional equivalents or replacements of kernel functions" fails to provide reasonably certain metes and bounds to the claims in which this term appears.

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CERTIFICATE OF SERVICE

I certify that this document is being served upon counsel of record for Defendants on December 13, 2024 via CM/ECF.

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