

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner

v.

AUTONOMOUS DEVICES, LLC,
Patent Owner

Case: IPR2023-01169
U.S. Patent No. 10,607,134

**PATENT OWNER'S REPLY IN SUPPORT OF
CONTINGENT MOTION TO AMEND**

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I. INTRODUCTION

PO submits this Reply in support of its Motion to Amend (“MTA”) (Paper 25). As the Board noted in its Preliminary Guidance (“Prelim. Guid.”) (Paper 31), Petitioner’s opposition (“Opp.”) (Paper 30) is replete with errors on virtually every issue, including those relating to §§ 112 and 103. To the extent Petitioner attempts to inject any new arguments in its forthcoming sur-reply, such attempts should be rejected, as PO would not have notice of such new arguments. The MTA should be granted for the reasons set forth in the MTA, the Preliminary Guidance, and below.

II. THE SUBSTITUTE CLAIMS ARE NOT INDEFINITE

The Board correctly noted that Petitioner’s § 112 argument (Opp., 25) is meritless. Prelim. Guid., 6-7. Petitioner’s opposition brief states that “[i]t is unclear whether the ‘second object representation’ of [21.l] refers to the ‘second one or more object representations’ of [21.d] or the ‘second object representation’ of [21.h].” Opp., 25. But Petitioner is ignoring the clear claim language and needlessly obfuscating the issue. The “second object representation” of limitation [21.l] would clearly have been understood by a POSITA to be the “second object representation” of limitation [21.h] because it is specifically recited as such. Limitations [21.h] and [21.l] are both new limitations (proposed to be added via amendment), and a POSITA would have seen that limitation [21.h] recites that the first one or more object representations comprise (in part) the second object representation. MTA,

Appx. A. In other words, as the Board correctly noted, the second object representation is included in the first one or more object representations, which is *claimed separately from (distinct from)* the second one or more object representations (*compare* [21.c] *with* [21.h]). Prelim. Guid., 6-7. Limitation [21.e] recites “at least partial match between the second one or more object representations and the first one or more object representations,” which confirms that the first one or more object representations are claimed distinctly from the second one or more object representations. *Id.*

Therefore, it is apparent that the claimed “second object representation”—which is included in the first one or more object representations—is distinct from the second one or more object representations. *Id.*, 7. Thus, Petitioner’s stated concern is easily resolved. Petitioner’s indefiniteness argument basically amounts to putting on blinders, and that argument should be rejected.

III. THE SUBSTITUTE CLAIMS ARE PATENTABLE OVER THE ART

The substitute claims distinguish the prior art. The arguments below mention claim 21 but also apply to the other substitute claims, which recite similar features.

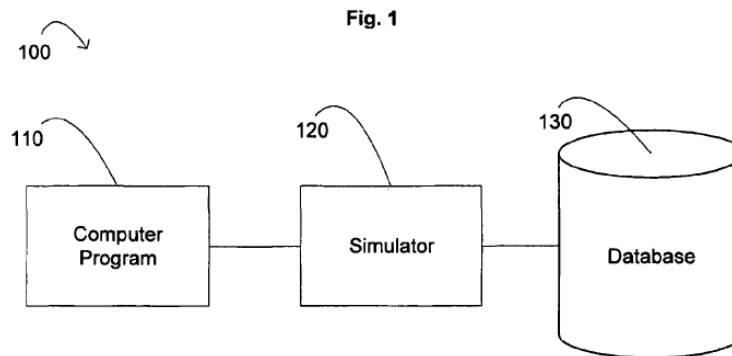
A. The Substitute Claims Are Patentable Over Thomas.

1. [SUB.1]: Thomas and Thomas-Hirai Do Not Disclose or Suggest Object Representations That Represent 3D Objects of the Application

The preliminary guidance confirms that Thomas, and also the hypothetical Thomas-Hirai combination, does not disclose or suggest at least: “a first object representation that represents a first three dimensional (3D) object of the application,” and “a second object representation that represents a second three dimensional (3D) object of the application” as recited in limitation [21.h] (the opposition brief calls this [SUB.1]).¹ Petitioner’s opposition brief relies on Thomas’ avatars for this limitation and does not mention anything about Hirai. Opp., 10 (“Each of Thomas’s avatars ... corresponds to a respective object of the application. ... A POSITA would have understood that Thomas’s avatars are three dimensional (3D) object[s] of the application ...”). But regarding the “*three dimensional (3D)* object” feature, the opposition brief has only pointed to the ESPN NFL 2K5 game, which Petitioner contends “has ‘3D’ characters.” *Id.*, 10. Petitioner’s contention is wrong. As explained below, *neither Thomas nor Hirai (nor the Thomas-Hirai combination) discloses 3D objects at all, much less an object representation representing a 3D object.*

¹ For the Board’s convenience, this brief uses the opposition’s “[SUB.*]” scheme.

As an initial matter, as the Board correctly noted (Prelim. Guid., 12 n.5), Petitioner's and Dr. Janet's reliance on Exhibit 1027 is unreliable because it is not clear when that article purportedly set forth was downloaded from the GameSpot website. *See* Ex. 1027, 1 (listing an alleged price of \$19.99 for the video game ESPN NFL 2K5), 2 (showing an advertisement with a different alleged price of \$34.98 for the same game). And as the Board correctly noted, the ESPN NFL 2K5 video game is in Thomas' computer program 110. Ex. 1005, 8:55-65 ("NFL 2K5 includes a computer program 110 in the form of [a] video game to be executed on a video game console."). For the first and second data structures that are included in the claimed first and second object representations, the opposition brief pointed to Thomas' sub-profiles 665 and 675. *See, e.g.,* Opp., 12-13, 22-23. But as the Board further noted, and as shown below in Figure 1, Thomas's simulator 120, which generates the user's profile including sub-profiles 665/675, is not in program 110, and neither is database 130, which stores the user's profile. Ex. 1005, 3:40-4:12, FIG. 1.



Id., FIG. 1.

Petitioner's arguments regarding the 3D objects of an application and their object representations are scattered, vague, and incoherent. Petitioner argued that the parts of Thomas that it mapped to the claimed 3D objects of the application and their object representations are generated by simulator 120 and are in database 130. Opp., 10 (discussing Thomas' learning mode, which is a mode of simulator 120, *see* Ex. 1005, 3:52-56, 7:45-49, 8:8-9), 12-13 (stating that Thomas' data structures are produced by simulator 120 and stored in database 130), 14-15, 18-19 (stating that Thomas' user profile that includes the data structures is created by simulator 120 and stored in database 130). But these Petitioner's contentions say nothing about 3D objects of an application, let alone object representations representing 3D objects of an application. Therefore, to the extent that Petitioner's arguments are even comprehensible, the portions of Thomas that Petitioner mapped to the claimed 3D objects of an application and their object representations ***are not disclosed as representing 3D avatars of the NFL 2K5 game, which is in program 110.*** As noted above, Figure 1 of Thomas clearly shows program 110, simulator 120, and database 130 as being distinct things, and Petitioner's attempted argument is so divorced from the claim language that it does not make a rational argument. Therefore, ***Thomas (and also the Thomas-Hirai combination) fails to disclose any 3D objects and further fails to even contemplate object representations representing 3D objects.***

The declaration testimony of Petitioner’s expert Dr. Janet basically just repeats what is found in the opposition brief, and should therefore be rejected. The opposition does not contain any obviousness analysis and relies only on Thomas for [SUB.1] but nevertheless contends [SUB.1] “is rendered obvious by Thomas alone or by the Thomas-Hirai combination” (Opp., 11)—emblematic of Petitioner’s nonsensical obviousness theories.

The remaining new limitations ([SUB.2]-[SUB.6]) all narrow the first/second object representations or their first/second data structures, and thus similarly cannot be, and are not, disclosed or suggested by Thomas or Thomas-Hirai. Additional flaws in Petitioner’s analysis are discussed in the following sections.

2. [SUB.3]: Thomas and Thomas-Hirai Do Not Disclose or Suggest the First Data Structure is Generated At Least In Response to Processing a Type and a Location of the First 3D Object

The opposition has not established that Thomas or Thomas-Hirai disclose/suggest limitation [21.j] (which the opposition brief calls [SUB.3]). Petitioner’s analysis is also wrong regarding the “in response to” aspect of this limitation. Petitioner mapped the claimed first data structure (recited in [SUB.2]) to A) Thomas’s user profile and alternatively to B) a modification of Thomas’s user profile in view of Hirai’s athlete character information, in the Thomas-Hirai combination. Opp., 15 (“[T]o create the user profile (e.g., the first data structure is

generated), whether implemented based on Thomas or Thomas-Hirai, ...”). However, Thomas and Thomas-Hirai fail to disclose/suggest generating either of those data structures *in response to the claimed processing of a type and a location*. In fact, Thomas and Thomas-Hirai do not even disclose or suggest the claimed first 3D object at all as discussed above, much less processing a type and location of it and generating the first data structure in response to such processing.

Regarding Thomas alone, Petitioner and Dr. Janet merely say that data structures can be generated in advance or on demand and that there is nothing unexpected or unpredictable about either of these approaches. Opp., 15; Ex. 1022, ¶91. But *Petitioner ignores the clear causative relationship expressed in this claim limitation*, and Petitioner fails to provide any analysis logically linking the generation of the data structure to the claimed processing of a type and location. Petitioner’s argument is conclusory. *InTouch Techs., Inc. v. VGO Commc’ns, Inc.*, *InTouch Techs.*, 751 F.3d 1327, 1352 (“[The expert’s] testimony primarily consisted of conclusory references to her belief that one of ordinary skill in the art *could* combine these references, not that they *would* have been motivated to do so.”) (emphasis in original). Also, Thomas’s user profile that Petitioner maps to the claimed first data structure is not generated in response to processing Thomas’s spatial positions and team affiliation/archetype. Indeed, the time 660 and score 670 within the user profile have nothing to do with spatial positions or team

affiliations/archetypes, and thus are not generated in response to their processing. Ex. 1005, FIG. 4. And to the extent Petitioner points to the spatial positions field 675 within the user profile 650 (despite clearly mapping to the “user profile,” *see* Opp. at last two lines of 14 and first two lines of 15), Thomas does not disclose or suggest and Petitioner has not provided any proper obviousness rationale for a POSITA to have generated the spatial positions field 675 in response to processing both type and location. This same flaw also infects Petitioner’s Thomas-Hirai combination, because the opposition does not even mention anything about Hirai for [SUB.3]. Petitioner’s attempt to handwave the claim language problematic to them as a mere “obvious implementation design choice” is conclusory and should be rejected.

To the extent Petitioner attempts to use its forthcoming sur-reply to add new arguments for this limitation, or beef up its conclusory obviousness argument, the Board should reject such attempts because Patent Owner will not have had notice.

3. [SUB.6]: Thomas and Thomas-Hirai Do Not Disclose or Suggest the First and Second Data Structures Are Correlated with the First One or More Instruction Sets.

The opposition brief has not established that Thomas or Thomas-Hirai discloses or suggests limitation [21.m] (the opposition brief calls it [SUB.6], reciting: “wherein the first data structure and the second data structure are correlated with the first one or more instruction sets for operating the first avatar of the

application.” As an initial matter, the claimed first and second data structures are included in the claimed first and second object representations according to limitations [21.i] and [21.l] (which Petitioner calls [SUB.2] and [SUB.5]), and because Thomas and Thomas-Hirai do not disclose or suggest the first and second object representations (*see supra* Section III.A.1 regarding [SUB.1]) it follows that Thomas and Thomas-Hirai also cannot and do not disclose [SUB.6].

Petitioner’s entire argument is two sentences that contend (i) “the situation and/or event are correlated with the instruction sets, e.g., user inputs” and (ii) “when a user responds to an event, the user’s response, when recorded, is not only associated with the occurrence of that event, but also with the situation during the occurrence of that event, which is defined by one or more current circumstances.” These contentions are conclusory *with no analysis or explanation of how they relate to the claim language of [SUB.6]*. And these contentions speak about events, situations, and circumstances allegedly being correlated with instruction sets and say nothing about any data structures (the claimed first and second data structures) being correlated with instruction sets. *In fact, they don’t mention data structures at all.* Dr. Janet’s declaration parrots the opposition brief nearly verbatim without adding anything of value for this limitation, and therefore should be rejected.

Although, Petitioner does not contend it in this element [SUB.6], Petitioner previously mapped the claimed first data structure to Thomas’s field 675 for a first

opposing-team avatar and mapped the claimed second data structure to i) field 675 for a second opposing-team avatar (although such second field is nonexistent in Thomas), ii) field 665 for a user-controlled avatar, or iii) to a modification of Thomas's field 675 in view of Hirai. Opp., 22-24. But *none of those fields (or modified Thomas field) are correlated with the claimed instruction sets, nor is the user profile containing those fields*, and Petitioner has not explained such a correlation.

Additionally, for this limitation the opposition only points to disclosures within Thomas, and nothing within Hirai. Opp., 24-25. But as explained above, Thomas does not disclose the claimed correlation, and Petitioner has not even mentioned obviousness for this limitation except a conclusory, unexplained assertion that “[SUB.6] is rendered obvious by Thomas alone or by the Thomas-Hirai combination”—an assertion that should be rejected due to the lack of obviousness analysis. Because of Petitioner's miniscule treatment of this limitation and the fact that it only mentions disclosures of Thomas (not Hirai), Petitioner's argument fails regarding the first data structure and second data structure of the hypothetical *Thomas-Hirai* combination being correlated with the claimed instruction sets.

In sum, Petitioner has not addressed the limitation [SUB.6] properly in a non-conclusory manner. The Board should not reward Petitioner for its cursory,

insubstantial, and conclusory discussion of this limitation. More fundamentally, neither Thomas nor Thomas-Hirai disclose *any two data structures both correlated with any instruction sets*, much less the claimed first data structure representing the first object of an application and including a type and coordinates of the first object and the claimed second data structure representing a second object of the application, both data structures correlated with instruction sets.

To the extent Petitioner attempts to add new arguments for this limitation via its forthcoming sur-reply, the Board should not credit such new arguments because Patent Owner will not have had notice.

B. Dr. Janet's Opinions Are Conclusory.

Dr. Janet has not added anything of substance to Petitioner's attorney arguments regarding the prior art, as his testimony basically parrots the opposition nearly verbatim for the limitations discussed above in Sections III.A.1-3. His testimony is thus of no probative value and should be rejected.

IV. CONCLUSION

For the reasons set forth above and in the MTA, the MTA should be granted.

Date: August 5, 2024

Respectfully submitted,

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CERTIFICATION OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S
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