

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner

v.

AUTONOMOUS DEVICES, LLC,
Patent Owner

Case: IPR2024-00745
U.S. Patent No. 11,663,474

PATENT OWNER'S PRELIMINARY SUR-REPLY

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I. INTRODUCTION

As authorized by the Board via e-mail on August 21, 2024, Autonomous Devices, LLC (“PO”) submits this Preliminary Sur-Reply responding to Petitioner’s Reply (Paper No. 7) to PO’s Preliminary Response (“POPR,” Paper No. 6). The Board should deny institution because Petitioner has not established a reasonable likelihood that the cited prior art renders the challenged claims unpatentable.

II. THE GROTMOL GROUNDS FAIL BECAUSE GROTMOL DOES NOT DISCLOSE THE CLAIMED FIRST DEVICE COMPRISING: A KNOWLEDGEBASE THAT INCLUDES INPUTS FOR INPUTTING A CIRCUMSTANCE REPRESENTATION CORRELATED WITH INSTRUCTION SETS FOR OPERATING A SECOND DEVICE

Petitioner argues that “PO appears to implicitly interpret claim 45 to require that the ‘knowledgebase’ be transferred from a ‘second device’ to a ‘first device,’” and that this is “inconsistent with the plain language of claim 45.” Reply, 1. ***PO only considers this concept of loading to answer Petitioner’s own use of this exact same concept in its argument that “the ‘trained configuration’ . . . ‘may be loaded to one or more other robots in order to provide learned behaviors.’”*** Pet., 59-60 (quoting Ex-1008, 33:27-30); Reply, 2 (citing Ex-1008, 33:15-32). Petitioner cannot reasonably deny PO the same concept of loading used, and indeed introduced by Petitioner, and even the attempt at this shows Petitioner’s inconsistency.

Using this Petitioner-introduced concept, Petitioner’s own argument and quote from Grotmol confirm that ***Petitioner relies on loading a trained configuration into another robot for alleged disclosure of instruction sets for***

operating a second device in claim 45. However, *Petitioner has not mapped Grotmol's "robot" or "trained configuration" to the knowledgebase in claim 45, but has mapped Grotmol's "adaptive controller" to the claimed knowledgebase (Pet., 56-57), and the adaptive controller is never loaded from one robot into another robot in Grotmol.* Thus, Grotmol fails to disclose and Petitioner fails in its contention that the adaptive controller in Grotmol is the claimed knowledgebase comprised in the first device that includes instruction sets for operating a second device, as required by claim 45. POPR, 22-23.

Petitioner's statement that "shared configurations are nonetheless loaded into the controller of the receiving (e.g., first) device according to Grotmol's express disclosure," is conclusory and is not supported by Grotmol's disclosure. Reply, 3. The cited portion of Grotmol merely discloses that "[t]he trained controller of the robot may comprise a trained configuration," Ex-1008, 33:24-25. The only thing in Grotmol that is loaded from an originating robot into a receiving robot is the "trained configuration" as discussed above. Again, *Petitioner has not mapped Grotmol's "robot" or "trained configuration" to the knowledgebase in claim 45, but has mapped Grotmol's "adaptive controller" to the claimed knowledgebase (Pet., 56-57), and the adaptive controller is never loaded from one robot into another robot in Grotmol,* as required by claim 45. And Grotmol discloses nothing about the adaptive controller on a robot having any instruction sets for operating another robot.

III. THE BUIBAS GROUNDS FAIL BECAUSE BUIBAS DOES NOT DISCLOSE OR SUGGEST THE CLAIMED KNOWLEDGEBASE WITH THE CLAIMED INPUTS FOR INPUTTING CIRCUMSTANCE REPRESENTATIONS CORRELATED WITH INSTRUCTION SETS FOR OPERATING A SECOND DEVICE

Petitioner’s argument that PO “cherry-picks the evidence to portray the ‘brain image’ as something less than what Buibas actually contemplated,” Reply, 4, is wrong. Buibas is painfully clear about its brain image and PO has cited to numerous disclosures in Buibas to confirm that Buibas’s “brain image” *is a collection of weights that does not include any inputs (especially not for inputting circumstance representations), any instruction sets (especially not for operating a second device), or anything other than weights.* POPR, 13-16.

Petitioner next argues that “brain images loaded onto a robot serve to ‘control . . . features’ of the robot and are associated with robot ‘functionality’.” Reply, 4. Petitioner again misdirects and its argument is pointless *since any association between a brain image and Petitioner’s contention about controlling features and robot functionality still does not say anything about what is actually claimed in claim element 45.1.* In fact, Petitioner’s contention does not even mention inputs for inputting a circumstance representation, instruction sets for operating a second device, and the inputs being correlated with instruction sets for operating a second device in a knowledgebase as recited in claim 45. Further, Petitioner’s best citation from Buibas actually disproves Petitioner’s own argument since *the cited portion of*

Buibas specifically equates brain images to “synaptic weight data configurations or profiles.” Ex-1005, ¶179.

Petitioner’s argument that “brain images in Buibas are not a mere collection of weights but rather also define a structure of the brain including relationships among neurons and inputs,” is wrong and not supported by Buibas’s disclosure. Reply, 4. Buibas is explicit throughout its disclosure that its brain image is a collection of weights. ***Petitioner’s own citation of Buibas discloses that brain images are “synaptic weight data configurations or profiles.”*** Ex-1005, ¶179. Buibas describes brain images as a “weight vector,” *id.*, ¶90. Buibas discloses downloading a weight vector or brain image into a robot, *id.*, ¶123. And Buibas discloses that the brain image comprises weights and setting the weights of a brain image. *Id.*, ¶183, ¶191. Thus, nothing in Buibas discloses or suggests that the brain image is a knowledgebase comprised in a first device and including inputs for inputting a circumstance representation correlated with instruction sets for operating a second device.

Petitioner’s contention that updating the brain image in Buibas “can further involve merging, adding to, deleting from, and other modifications to the structure of the network or brain defined by the brain image,” Reply, 4, fails to support its argument, since element 45.1 does not recite “updating the brain image, . . . merging/adding to/deleting from, and other modifications.” In fact, ***Petitioner’s***

contention does not even mention inputs for inputting a circumstance representation, instruction sets for operating a second device, and the inputs being correlated with the instruction sets for operating a second device in a knowledgebase, all required by element 45.1.

Finally, Petitioner points to Buibas's robotic brain, bSTEM, and figures 10 and 11b and goes through a painstaking process of showing that they involve some *general inputs and outputs*. Reply, 5. But element 45.1 does not recite general inputs and outputs and instead recites inputs *specifically for inputting a circumstance representation*, instruction sets *specifically for operating a second device*, and *these specifically recited inputs being correlated with these specifically recited instruction sets in a knowledgebase*. Thus, Petitioner ignores the specifically recited limitations of element 45.1 and fails to show anything that teaches these limitations. The Petition focuses its mapping of the recited knowledgebase to Buibas's brain image, and Petitioner is now impermissibly attempting to change to another mapping (which itself fails to disclose the recited element 45.1).

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Respectfully submitted,

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CERTIFICATION OF SERVICE

The undersigned hereby certifies that a copy of this **PATENT OWNER'S PRELIMINARY SUR-REPLY** has been served on Petitioner via email on the following counsel of record for Petitioner:

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