

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 CONTINGENT MOTION TO AMEND

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	STATEMENT OF REQUESTED RELIEF	1
III.	THE SUBSTITUTE CLAIMS MEET ALL REQUIREMENTS OF 35 U.S.C. § 316 AND 37 C.F.R. § 42.121	2
A.	Listing of Proposed Substitute Claims.....	2
B.	The Number of Substitute Claims is Reasonable.....	2
C.	The Substitute Claims Respond to Patentability Grounds Involved in this Trial.....	5
D.	The Substitute Claims Do Not Broaden the Claim Scope or Introduce New Subject Matter	5
1.	No Claim Broadening	6
2.	No New Matter.....	7
	Support Regarding Limitations in Substitute Claim Corresponding to Original Claim 45	9
	Support Regarding Limitations in Substitute Claims Corresponding to Claims 46/47/51/60	11
	Support Regarding Limitations in Substitute Claims Corresponding to Claims 56/57	13
	Support Regarding Limitations Added Via Amendment to Substitute Claim 85	15
IV.	THE LEVEL OF ORDINARY SKILL IN THE ART	18
V.	THE SCOPE AND CONTENT OF THE PRIOR ART	18
VI.	CLAIM CONSTRUCTION	19
VII.	THE SUBSTITUTE CLAIMS ARE PATENTABLE OVER THE ART	19
A.	The Substitute Claims Are Patentable Over the Instituted Art in this Proceeding.....	20

B.	The Substitute Claims Are Patentable Over the Art of Record From Prosecution.....	24
C.	The Substitute Claims Are Patentable Over the Art at Issue in Other IPR Petitions.	24
VIII.	CONCLUSION.....	25
	APPENDIX A – SUBSTITUTE CLAIMS.....	1
	Claim 85 (Proposed substitute for claim 45, if claim 45 is found unpatentable):	1
	Claim 86 (Proposed substitute for claim 46, if claim 45 is found unpatentable):	3
	Claim 87 (Proposed substitute for claim 47, if claim 45 is found unpatentable):	3
	Claim 88 (Proposed substitute for claim 51, if claim 45 is found unpatentable):	4
	Claim 89 (Proposed substitute for claim 56, if claim 56 found <i>unpatentable</i>):.....	4
	Claim 90 (Proposed substitute for claim 57, if claim 57 found <i>unpatentable</i>):.....	4
	Claim 91 (Proposed substitute for claim 60, if claim 45 is found unpatentable):	5
	Claim 92 (Proposed substitute for claim 56, if claim 56 found <i>patentable</i>):.....	5
	Claim 93 (Proposed substitute for claim 57, if claim 57 found <i>patentable</i>):.....	7

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Aqua Products, Inc. v. Matal</i> , 872 F.3d 1290 (Fed. Cir. 2017)	2, 19
<i>Idle Free Sys., Inc. v. Bergstrom, Inc.</i> , IPR2012-00027, Paper 26 (P.T.A.B. June 11, 2013)	3, 4, 5
<i>Intuitive Surgical, Inc. v. Ethicon LLC</i> , IPR2018-00933, Paper 31 (P.T.A.B. Dec. 3, 2019)	4
<i>Lectrosonics, Inc. v. Zaxcom, Inc.</i> , IPR2018-01129, Paper 15 (PTAB Feb. 25, 2019).....	2, 4, 5, 6
<i>Nike, Inc. v. Adidas AG</i> , 812 F.3d 1326 (Fed. Cir. 2016)	3
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005)	19
<i>Toyota Motor Corp. v. Cellport Systems, Inc.</i> , IPR2015-00633, Paper 11 (P.T.A.B. Aug. 14, 2015).....	19
Statutes	
35 U.S.C. § 316.....	2
35 U.S.C. § 316(d)	2
35 U.S.C. § 316(d)(1)(B)	2, 3, 5
Other Authorities	
37 C.F.R. § 42.121	2
37 C.F.R. § 42.121(a)(1)(ii)	1
37 C.F.R. § 42.121(a)(2)(ii)	7

37 C.F.R. § 42.121(a)(3)	3, 5
37 C.F.R. § 42.121(b)	2, 7
37 C.F.R. § 41.121(d)(2)	25

EXHIBIT LIST

Exhibit	Description	Previously Submitted
2001	Declaration of Dr. Eli Saber	X
2002	Dr. Eli Saber CV	X
2003	Deposition transcript of Dr. Jason Janet dated December 19, 2024 in IPR2024-00745	X
2004	File History of U.S. Patent App. No. 15/340,991 (“the ‘991 Application”)	X

I. INTRODUCTION

Patent Owner Autonomous Devices, LLC (“PO”) submits this motion to amend (MTA) U.S. Patent No. 11,663,474 (“the ’474 patent”) (Ex. 1001) contingent on the outcome of this trial. The nature of the contingency regarding amending specific claims is explained below in §§ II and III.

II. STATEMENT OF REQUESTED RELIEF

First, PO requests preliminary guidance pursuant to 37 C.F.R. § 42.121(a)(1)(ii), the parties’ January 7, 2025 conference call, and the Board’s January 8, 2025 Order (Paper 12).

Second, in the event the Board finds claim 45 unpatentable, PO requests that the Board consider Substitute Claim 85 (all substitute claims are shown in Appx. A). Substitute Claims 86-88 and 91 are presented as well, which are only included to preserve the dependencies of original claims 46, 47, 51, and 60 which ultimately depend from claim 45. The purpose for including amended claims 86-88 and 91 is to ensure that those claims include proper antecedent basis and do not depend from an otherwise unpatentable claim (claim 45) should the Board find claim 45 unpatentable.

Third, in the event the Board finds claims 56/57 unpatentable, PO requests that the Board consider Substitute Claims 89/90.

Fourth, if the Board instead finds claims 56/57 patentable, PO requests that the Board consider Substitute Claims 92/93, which contain, *inter alia*, all of the limitations of original claims 45/46 and are only presented so that claims 56/57 (depending from claim 46, which depends from claim 45), if held patentable, have proper antecedent basis and do not depend from an otherwise unpatentable claim.

III. THE SUBSTITUTE CLAIMS MEET ALL REQUIREMENTS OF 35 U.S.C. § 316 AND 37 C.F.R. § 42.121

A motion to amend must (1) propose a reasonable number of substitute claims, (2) that respond to a ground of unpatentability involved in the trial (3) that do not enlarge the scope of the claims or introduce new matter, and (4) are not shown by a preponderance of the evidence to be unpatentable. *See* Memorandum re: Guidance on Motions to Amend in view of *Aqua Products* (Nov. 21, 2017) at 2; 35 U.S.C. § 316(d); 37 C.F.R. § 42.121. It is Petitioner’s burden to show that the substitute claims are unpatentable. *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 15 at 4 (PTAB Feb. 25, 2019) (precedential) (“*Lectrosonics*”).

A. Listing of Proposed Substitute Claims.

PO submits substitute claims as shown in Appendix A (the “Substitute Claims”) as required by 37 C.F.R. § 42.121(b).

B. The Number of Substitute Claims is Reasonable.

PO is entitled to “propose a reasonable number of substitute claims” when filing an MTA in an IPR proceeding. 35 U.S.C. § 316(d)(1)(B). PO can rebut the

presumption that only one substitute claim is needed to replace each challenged claim by demonstrating need according to the circumstances. *See* 37 C.F.R. § 42.121(a)(3). “Thus, to the extent [PO] seeks to propose more than one substitute claim” for claims 56/57, PO “should explain,” on a claim-by-claim basis, “the need for the additional claims and why the number of proposed substitute claims is reasonable.” Paper 12 at 5, 7 (“[PO] should adopt a claim-by-claim approach to specifying the contingency of substitution, *e.g.*, which claim is to be substituted for which claim, and under what circumstances.”). Furthermore, the Federal Circuit has endorsed a Board decision holding that “when a patent owner seeks to provide more than one substitute claim for a challenged claim, ‘the patent owner needs to show patentable distinction of the additional substitute claim over all other substitute claims for the same challenged claim.’” *Nike, Inc. v. Adidas AG*, 812 F.3d 1326, 1340-41 (Fed. Cir. 2016) (citing *Idle Free Sys., Inc. v. Bergstrom, Inc.*, IPR2012-00027, Paper 26 at 8-9 (P.T.A.B. June 11, 2013)).

In this proceeding, Petitioner challenged 10 claims. *See* Pet. (Paper 2), 1. PO proposes 9 substitute claims according to various contingencies, as noted above. For the 5 original claims (45, 46, 47, 51, 60) other than 56/57 that are discussed in this MTA, PO proposes 5 substitute claims (85, 86, 87, 88, 91) in the event independent claim 45 is unpatentable, which is a reasonable number (due to the one-to-one substitution) and thus satisfies 35 U.S.C. § 316(d)(1)(B) and 37 C.F.R. §

42.121(a)(3). *E.g., Intuitive Surgical, Inc. v. Ethicon LLC*, IPR2018-00933, Paper 31 at 9 (P.T.A.B. Dec. 3, 2019); *see also Lectrosonics* at 45-46.

Claims 56/57 each ultimately depend from claim 46, which in turn depends from independent claim 45, and claims 56/57 are being argued in the concurrently-filed PO Response as being patentable over the Petition's prior art grounds. For each of original dependent claims 56/57, PO proposes 2 substitute claims in the alternative, one of which is contingent upon the Board's finding the original claim patentable and the other of which is contingent upon the Board's finding the original claim unpatentable. Thus, once the Board determines patentability of claims 56 and 57, it is not possible that both of the alternatives of substitute claims for claim 56 (or both of the alternatives of substitute claims for claim 57) would be issued.

PO is proposing alternative substitute claims in this manner in order to ensure that claims 56/57, if held patentable, will be rewritten in independent format (including the limitations of the base claim 45 and intervening claim 46) and have proper antecedent basis and do not depend from an otherwise unpatentable claim. Further, under *Idle Free*, Substitute Claims 92/93 are patentably distinct from Substitute Claims 89/90. IPR2012-00027, Paper 26 at 6, 8-9. Claims 92 and 93 recite the same subject matter and have the same claim scope as claims 56/57, respectively, but are rewritten in independent format as noted above. Claims 89 and 90 have narrower scope than claims 56/57 since, being dependent on substitute claim 86

(which depends from Substitute Claim 85), these substitute claims include the narrowing limitations added via amendment to Substitute Claim 85. *See* Appx. A ([85.8]-[85.14]). Here, “[e]ach substitute claim for the same challenged claim” is “proposed for a meaningful reason.” *Idle Free*, IPR2012-00027, Paper 26 at 9.

Thus, two claims (presented in the alternative) is a reasonable number of substitute claims for each of original challenged claims 56/57 under 35 U.S.C. § 316(d)(1)(B) and 37 C.F.R. § 41.121(a)(3).

C. The Substitute Claims Respond to Patentability Grounds Involved in this Trial.

Substitute Claims 85-93 respond to the Petition’s grounds. For example, this motion proposes adding certain limitations to existing challenged claims to distinguish them from Buibas (Ex. 1005) in view of Sinyavskiy (Ex. 1006) (Ground 1A); Grotmol (Ex. 1008) (Ground 2A); and Grotmol in view of Buibas (Ground 2C). Pet., 1. Ex. 2001, ¶¶131-132. This motion seeks to amend those challenged claims to address Petitioner’s arguments. *Compare* Pet. and Ex. 1001, *with* Appx. A (Substitute Claims). These amendments directly overcome the asserted grounds.

D. The Substitute Claims Do Not Broaden the Claim Scope or Introduce New Subject Matter

“A motion to amend may not present substitute claims that enlarge the scope of the claims of the challenged patent or introduce new subject matter.” *Lectrosonics* at 6-8. PO’s substitute claims comply with both of these requirements.

1. No Claim Broadening

The substitute claims retain all of their original limitations and only add narrowing elements. The proposed amendment further limits the first device of claim 45 by requiring that: the claimed knowledgebase include a neural network and the claimed inputs be one or more input neurons of the neural network (limitation [85.8]); the claimed processors execute machine readable code that generate a stream of circumstance representations that each include multiple object representation data structures (*e.g.*, label for object type, coordinates for object location, and a computer model for object size) and represent multiple objects *each* detected at a first (and second) time (limitations [85.9], [85.10], [85.11], [85.12]); the determining the claimed one or more instruction sets for operating the claimed second (and third) device include inputting the multiple object representation data structures into the one or more input neurons and using a correlation between the one or more input neurons and the one or more instruction sets for operating the second (and third) devices (limitations [85.13], [85.14]). *Lectrosonics* at 7 (“[A] proposed substitute claim adding a novel and nonobvious feature or combination to avoid the prior art in an instituted ground of unpatentability will not enlarge the scope of the claims.”).

Further, each substitute dependent claim (including 89/90) rewrites its corresponding original claim to now ultimately depend from Substitute Claim 85. These amendments are made to further distinguish the claims over the prior art raised

in the Petition and therefore (by virtue of the limitations added to Substitute Claim 85) narrow the claim scope in compliance with 37 C.F.R. § 42.121(a)(2)(ii). Alternatively, Substitute Claims 92/93 do not broaden the scope of original dependent claims 56/57, as these substitute claims merely rewrite each of those dependent claims in independent form (including the limitations of the base claim and intervening claim) if claims 56/57 are found patentable.

2. No New Matter

The substitute claims do not introduce new subject matter or enlarge the claim scope (§ 42.121(a)(2)(ii)) and are supported by the original non-provisional application (37 C.F.R. § 42.121(b)). The '474 patent issued from U.S. Patent Application No. 17/561,976 (“the '976 Application”), which is found at pages 279-485 (figures and specification begin at page 294) of Exhibit 1002. For the purposes of this motion, PO identifies the following portions of the '976 Application as providing support for the proposed amendments. In addition, PO submits the declaration of Dr. Saber. *See* Ex. 2001, ¶¶134-135. This shows that a person of ordinary skill in the art (“POSA”) would have understood, based on the disclosures of the '976 Application, that the inventor possessed the Substitute Claims as of

November 2, 2016, which is the earliest claimed priority date.¹ Lastly, the written description of the '976 Application is sufficient to inform a POSA how to both make and use the invention as recited in the Substitute Claims. Ex. 2001, ¶¶136-137. Exemplary citations for each limitation of the Substitute Claims are summarized below (and detailed in Dr. Saber's Declaration, Ex. 2001, ¶¶135). The Substitute Claims other than 92/93 add additional limitations to independent claim 45, rewrite each challenged dependent claim to depend from substitute claim 85 (regarding substitute claim 86) or from substitute claim 86 (regarding substitute claims 87-91), and/or rewrite original claims 56/57 into their own independent format (absent limitations being added via amendment to substitute claim 85) if these original claims are found patentable by the Board.

¹ The '474 patent is a continuation of U.S. Patent Application No. 16/540,972, which issued as U.S. Patent No. 11,238,344. The '972 Application is a continuation of U.S. Patent Application No. 15/340,991 ("the '991 Application"), filed on November 2, 2016, which issued as U.S. Patent No. 10,452,974. Citations are provided to originally-filed '976 and '991 Applications (Exs. 1007, 2004)—*e.g.*, '976 App., [1:25-30] is Ex. 1007, 334:25-30, and '991 App., [1:15-20] is Ex. 2004, 305:15-20.

**Support Regarding Limitations in Substitute Claim
Corresponding to Original Claim 45**

The following limitations are in Substitute Claim 85 and are also present in claim 45. Dr. Saber's testimony confirms that the inventor was in possession of these limitations (and the claim as a whole) at the time of filing the '991 Application. *See* Ex. 2001, ¶135. The '976 Application discloses element [85.pre]. *See* [Title], [Abstract], [Fig. 2], [Fig. 4A], [Figs. 38-39]; *see also* '991 App., [Title], [Abstract], [Fig. 2], [Fig. 4A], [Figs. 38-39]. The '976 Application discloses element [85.1]. *See* [Fig. 12 - Artificial Intelligence Unit 110 anticipates Instruction Sets 526 based on incoming/inputted Collections of Object Representations 525], [87:5-7], [92:1-16], [87:15-21 - "Artificial Intelligence Unit 110 comprises the functionality for anticipating one or more Instruction Sets 526 based on one or more incoming Collections of Object Representations 525."], [92:8-9 - "Knowledgebase 530 may be or include Neural Network 530a"], [Fig. 17 - Model A showing input nodes/neurons correlated using downstream connections with output nodes/neurons that include/produce instruction sets for operating a device], [94:1-3 - "For example, a neural network may include one or more input neurons that can be activated by inputs. Activations of these neurons can then be passed on, weighted, and transformed by a function to other neurons."], [93:27-94:7], [2:27-30], [46:12-14], [93:15-17], [86:8-11], [86:15-19], [147:32-148:4], [Figs. 38-39 - "second device": Loader 98a or Boat 98b], [92:17-26], [Figs. 13-14] ; *see also* '991 App., [Fig. 12],

[87:10-12], [92:7-22], [87:21-26], [92:14-15], [Fig. 17], [94:7-9], [93:33-94:13], [2:17-20], [46:5-7], [93:21-23], [86:13-16], [86:20-24], [147:38-148:10], [Figs. 38-39], [92:23-32], [Figs. 13-14]. The '976 Application discloses element [85.2]. *See* [Fig. 2], [Figs. 3A-3E], [62:32-63:13], [63:14-64:36], [65:3-66:19] ; *see also* '991 App., [Fig. 2], [Figs. 3A-3E], [62:33-63:14], [63:15-64:36], [65:3-66:20]. The '976 Application discloses element [85.3]. *See* [Fig. 1], [52:30-33], [52:38-53:5], [53:25-54:9], [1:35-36], [15:22-26] ; *see also* '991 App., [Fig. 1], [52:26-29], [52:34-53:1], [53:22-54:6], [1:25-26], [15:13-16]. The '976 Application discloses element [85.4]. *See* [15:27-29], [50:9-12], [58:7-9], [Fig. 1], [53:10-11], [54:5-9], [54:10-18] ; *see also* '991 App., [15:17-19], [50:5-8], [58:9-11], [Fig. 1], [53:6-7], [54:2-6], [54:7-16]. The '976 Application discloses element [85.5]. *See* [65:5-10], [146:30-32], [136:13-15], [65:19-22], [Figs. 4A-4B], [72:11-73:5], [Fig. 2], [Figs. 3A-3E], [62:32-63:13], [63:14-64:36], [65:3-66:19] ; *see also* '991 App., [65:5-10], [146:35-37], [136:23-25], [65:19-22], [Figs. 4A-4B], [72:14-73:8], [Fig. 2], [Figs. 3A-3E], [62:33-63:14], [63:15-64:36], [65:3-66:20]. The '976 Application discloses element [85.6]. *See* [87:15-21 – “Artificial Intelligence Unit 110 comprises the functionality for anticipating one or more Instruction Sets 526 based on one or more incoming Collections of Object Representations 525.”], [Fig. 12 – Artificial Intelligence Unit 110 anticipates Instruction Sets 526 based on incoming/inputted Collections of Object Representations 525], [92:8-9 – “Knowledgebase 530 may be or include

Neural Network 530a”], [Fig. 17 – Model A showing input nodes/neurons correlated using downstream connections with output nodes/neurons that include/produce instruction sets for operating a device], [94:1-3 – “For example, a neural network may include one or more input neurons that can be activated by inputs. Activations of these neurons can then be passed on, weighted, and transformed by a function to other neurons.”], [93:27-94:7], [2:27-30], [46:12-14], [93:15-17], [86:8-11], [86:15-19], [147:32-148:4], [Figs. 38-39 – “second device”: Loader 98a or Boat 98b], [Figs. 13-14] ; *see also* ’991 App., [87:21-26], [Fig. 12], [92:14-15], [Fig. 17], [94:7-9], [93:33-94:13], [2:17-20], [46:5-7], [93:21-23], [86:13-16], [86:20-24], [147:38-148:10], [Figs. 38-39], [Figs. 13-14]. The ’976 Application discloses element [85.7]. *See* [2:8-13], [15:38-16:5], [16:21-26], [Fig. 33 – steps 9230, 9235], [143:10-15] ; *see also* ’991 App., [1:37-2:3], [15:28-34], [16:11-16], [Fig. 33], [143:18-23].

Support Regarding Limitations in Substitute Claims Corresponding to Claims 46/47/51/60

The following limitations are in the Substitute Claims corresponding to claims 46/47/51/60. Dr. Saber confirms the inventor possessed these limitations (and each claim as a whole) at the time of filing. *See* Ex. 2001, ¶135.

Substitute Claim 86: The ’976 Application discloses [86.1]. *See* [65:5-10], [146:30-32], [136:13-15], [Figs. 4A-4B], [72:11-73:5]; *see also* ’991 App., [65:5-10], [146:35-37], [136:23-25], [Figs. 4A-4B], [72:13-73:8]. The ’976 Application discloses [86.2]. *See* [Fig. 38 – Loader 98a ground vehicle], [Fig. 39 – Boat 98b

aquatic vehicle], [2:14-19], [62:2-4]; *see also* '991 App., [Figs. 38-39], [2:4-9], [62:3-5]. Each of these limitations are present in claim 46.

Substitute Claim 87: The '976 Application discloses [87.1]. *See* [Fig. 17 – Model A], [93:27-94:7], [14:29-30 – “The connection may include or be associated with at least one of: an occurrence count, a weight, a parameter, or a data.”], [98:9-11], [135:3-6 – learning process: “method 9100 for learning and/or using a device’s circumstances for autonomous device operation”], [Fig. 22 – “learning process”], [86:8-11], [86:15-19], [93:15-17], [147:32-148:4], [Figs. 38-39 – “second device”: Loader 98a or Boat 98b], [146:24-25], [149:31-32]; *see also* '991 App., [Fig. 17], [93:33-94:13], [14:19-20], [98:16-18], [135:14-17], [Fig. 22], [86:13-16], [86:20-24], [93:21-23], [147:38-148:10], [Figs. 38-39], [146:29-30], [149:38-39]. This limitation is present in claim 47.

Substitute Claim 88: The '976 Application discloses [88.1]. *See* [92:1-16], [Figs. 13-14], [135:3-6 – learning process: “method 9100 for learning and/or using a device’s circumstances for autonomous device operation”], [Fig. 22 – “learning process”], [86:8-11], [86:15-19], [93:15-17], [147:32-148:4], [Figs. 38-39 – “second device”: Loader 98a or Boat 98b], [146:24-25], [149:31-32], [92:17-26], [Fig. 17 – Model A], [93:27-94:7]; *see also* '991 App., [92:7-22], [Figs. 13-14], [135:14-17], [Fig. 22], [86:13-16], [86:20-24], [93:21-23], [147:38-148:10], [Figs. 38-39],

[146:29-30], [149:38-39], [92:23-32], [Fig. 17], [93:33-94:13]. This limitation is present in claim 51.

Substitute Claim 91: The '976 Application discloses [91.1]. *See* [65:5-10], [66:1-6], [66:10], [Figs. 4A-4B], [72:11-73:5]; *see also* '991 App., [65:5-10], [66:1-6], [66:10-11], [Figs. 4A-4B], [72:14-73:8]. This limitation is present in claim 60.

Support Regarding Limitations in Substitute Claims Corresponding to Claims 56/57

The following limitations are in each of Substitute Claims 89/92 (alternatives corresponding to claim 56) and Substitute Claims 90/93 (corresponding to claim 57). Dr. Saber's testimony confirms that the inventor was in possession of these limitations at the time of filing the '991 Application. *See* Ex. 2001, ¶135.

Substitute Claims 89/92: The '976 Application discloses [89.1/92.10]. *See* [92:8-9 – "Knowledgebase 530 may be or include Neural Network 530a"], [Fig. 17 – Model A showing input nodes/neurons correlated using downstream connections with output nodes/neurons that include/produce instruction sets for operating a device], [94:1-3 – "For example, a neural network may include one or more input neurons that can be activated by inputs. Activations of these neurons can then be passed on, weighted, and transformed by a function to other neurons."], [93:27-94:7], [2:27-30], [46:12-14], [93:15-17], [86:8-11], [86:15-19], [147:32-148:4], [Figs. 38-39 – "third device": Loader 98a or Boat 98b], [Figs. 13-14]; *see also* '991 App., [92:14-15], [Fig. 17], [94:7-9], [93:33-94:13], [2:17-20], [46:5-7], [93:21-23],

[86:13-16], [86:20-24], [147:38-148:10], [Figs. 38-39], [Figs. 13-14]. The '976 Application discloses [89.2/92.11]. *See* [135:3-6 – learning process: “method 9100 for learning and/or using a device’s circumstances for autonomous device operation”], [142:27-30 – “another learning process”], [86:8-1], [86:15-19], [93:15-17], [147:32-148:4], [Fig. 38 – “second device”: Loader 98a], [Fig. 39 – “third device”: Boat 98b], [149:31-32], [92:17-26], [Fig. 17 – Model A], [14:29-30 – “The connection may include or be associated with at least one of: an occurrence count, a weight, a parameter, or a data.”], [98:9-11], [92:1-16], [Figs. 13-14]; *see also* '991 App., [Figs. 32-33], [135:14-17], [142:37-143:1], [86:13-16], [86:20-24], [93:11-23], [147:38-148:10], [Figs. 38-39], [149:38-39], [92:23-32], [Fig. 17], [14:19-20], [98:16-18], [92:7-22], [Figs. 13-14]. Each of these limitations are present in claim 56.

Substitute Claims 90/93: The '976 Application discloses [90.1/93.10]. *See* [92:8-9 – “Knowledgebase 530 may be or include Neural Network 530a”], [Fig. 17 – Model A showing input nodes/neurons correlated using downstream connections with output nodes/neurons that include/produce instruction sets for operating a device], [94:1-3 – “For example, a neural network may include one or more input neurons that can be activated by inputs. Activations of these neurons can then be passed on, weighted, and transformed by a function to other neurons.”], [93:27-94:7], [2:27-30], [46:12-14], [93:15-17], [86:8-11], [86:15-19], [147:32-148:4],

[Figs. 38-39 – “third device”: Loader 98a or Boat 98b], [Figs. 13-14]; *see also* ’991 App., [92:14-15], [Fig. 17], [94:7-9], [93:33-94:13], [2:17-20], [46:5-7], [93:21-23], [86:13-16], [96:20-24], [147:38-148:10], [Figs. 38-39], [Figs. 13-14]. This limitation is present in claim 57.

Support Regarding Limitations Added Via Amendment to Substitute Claim 85

The following limitations are additions to Substitute Claim 85, and Dr. Saber’s testimony confirms that the inventor was in possession of these limitations (and the claim as a whole) at the time of filing the ’991 Application. *See* Ex. 2001, ¶135. The ’976 Application discloses element [85.8]. *See* [92:8-9], [Fig. 17 – Model A showing input nodes/neurons], [94:1-2 – “For example, a neural network may include one or more input neurons that can be activated by inputs.”], [93:27-94:7]; *see also* ’991 App., [92:14-15], [Fig. 17], [94:7-8], [93:33-94:13]. The ’976 Application discloses element [85.9]. *See* [15:27-29], [50:9-12], [58:7-9], [Fig. 1], [53:10-11], [54:5-9], [54:10-18]; *see also* ’991 App., [15:17-19], [50:5-8], [58:9-11], [Fig. 1], [53:6-7], [54:2-6], [54:7-16]. The ’976 Application discloses element [85.10]. *See* [25:5-8], [65:22-36], [Fig. 34], [146:30-32], [136:13-15], [Figs. 4A-4B], [72:11-73:5]; *see also* ’991 App., [24:34-37], [65:22-36], [Fig. 34], [146:35-37], [136:23-25], [Figs. 4A-4B], [72:14-73:8]. The ’976 Application discloses element [85.11]. *See* [65:5-36], [146:30-32], [Figs. 4A-4B], [72:11-73:5], [66:24-28], [135:35-136:1], [66:1-6], [135:14-19], [135:19-31], [25:22-27], [Figs. 15-16];

see also '991 App., [65:5-36], [146:35-37], [Figs. 4A-4B], [72:14-73:8], [66:25-29], [136:7-12], [66:1-6], [135:25-30], [135:30-136:3], [25:12-17], [Figs. 15-16]. The '976 Application discloses element [85.12]. *See* [65:5-36], [146:30-32], [Figs. 4A-4B], [72:11-73:5], [66:24-28], [135:35-136:1], [66:1-6], [135:14-19], [135:19-31], [25:22-27], [Figs. 15-16], [Fig. 38 – Objects 615aa-615ad], [Fig. 39 - Objects 615ba-615bd]; *see also* '991 App., [65:5-36], [146:35-37], [Figs. 4A-4B], [72:14-73:8], [66:25-29], [136:7-12], [66:1-6], [135:25-30], [135:30-136:3], [25:12-17], [Figs. 15-16], [Figs. 38-39]. The '976 Application discloses element [85.13]. *See* [87:15-21 – “Artificial Intelligence Unit 110 comprises the functionality for anticipating one or more Instruction Sets 526 based on one or more incoming Collections of Object Representations 525.”], [Fig. 12 - Artificial Intelligence Unit 110 anticipates Instruction Sets 526 based on incoming/inputted Collections of Object Representations 525], [92:8-9 – “Knowledgebase 530 may be or include Neural Network 530a”], [Fig. 17 – Model A showing input nodes/neurons correlated using downstream connections with output nodes/neurons that include/produce instruction sets for operating a device], [94:1-3 – “For example, a neural network may include one or more input neurons that can be activated by inputs. Activations of these neurons can then be passed on, weighted, and transformed by a function to other neurons.”], [93:27-94:7], [2:27-30], [46:12-14], [25:5-8], [65:22-36], [Fig. 34], [146:30-32], [136:13-15], [Figs. 4A-4B], [72:11-73:5], [93:15-17], [86:8-11],

[147:32-148:4], [Fig. 38 – “second device”: Loader 98a], [Figs. 13-14]; *see also* ’991 App., [87:21-26], [Fig. 12], [92:14-15], [Fig. 17], [94:7-9], [93:33-94:13], [2:17-20], [46:5-7], [24:34-37], [65:22-36], [Fig. 34], [146:35-37], [136:23-25], [Figs. 4A-4B], [72:14-73:8], [93:21-23], [86:13-16], [147:38-148:10], [Fig. 38], [Figs. 13-14]. The ’976 Application discloses element [85.14]. *See* [87:15-21 – “Artificial Intelligence Unit 110 comprises the functionality for anticipating one or more Instruction Sets 526 based on one or more incoming Collections of Object Representations 525.”], [Fig. 12 - Artificial Intelligence Unit 110 anticipates Instruction Sets 526 based on incoming/inputted Collections of Object Representations 525], [92:8-9 – “Knowledgebase 530 may be or include Neural Network 530a”], [Fig. 17 – Model A showing input nodes/neurons correlated using downstream connections with output nodes/neurons that include/produce instruction sets for operating a device], [94:1-3 – “For example, a neural network may include one or more input neurons that can be activated by inputs. Activations of these neurons can then be passed on, weighted, and transformed by a function to other neurons.”], [93:27-94:7], [2:27-30], [46:12-14], [25:5-8], [65:22-36], [Fig. 34], [146:30-32], [136:13-15], [Figs. 4A-4B], [72:11-73:5], [93:15-17], [86:8-11], [86:15-19], [147:32-148:4], [Fig. 39 – “third device”: Boat 98b], [Figs. 13-14]; *see also* ’991 App., [87:21-26], [Fig. 12], [92:14-15], [Fig. 17], [94:7-9], [93:33-94:13], [2:17-20], [46:5-7], [24:34-37],

[65:22-36], [Fig. 34], [146:35-37], [136:23-25], [Figs. 4A-4B], [72:14-73:8], [93:21-23], [86:13-16], [86:20-24], [147:38-148:10], [Fig. 39], [Figs. 13-14].

IV. THE LEVEL OF ORDINARY SKILL IN THE ART

In this motion, as in the concurrently-filed PO Response, PO and its expert adopt Petitioner's description of the level of skill of a POSA: at least: (1) a bachelor's degree in electrical engineering, computer engineering, computer science, systems engineering, or equivalent course work with two to three years of work experience in computer vision, image/video processing, and/or machine learning; or (2) a master's degree in electrical engineering, computer engineering, computer science, systems engineering, or equivalent course work with a focus in computer vision, image/video processing, and/or machine learning. *See* Ex. 2001, ¶¶46-47.

V. THE SCOPE AND CONTENT OF THE PRIOR ART

The Petition does not rely on any of the references cited during the original prosecution, and instead relies on grounds involving (a) Grotmol alone or (b) in combination with Buibas or (c) Buibas in combination with Sinyavskiy. PO presumes Petitioner has set forth what it believed to be the closest prior art in its Petition. As no prior art references of record from prosecution are cited by Petitioner as a basis for unpatentability in this IPR, it is undisputed that such prosecution-related prior art of record does not disclose or suggest the elements of the originally issued claims (as confirmed by the USPTO's issuance of the '474 patent over that

prior art). Similarly, no prior art of record in this IPR proceeding (or others previously filed by Petitioner) describes or suggests the additional elements recited in the Substitute Claims, as described below. Ex. 2001, ¶¶138-146.

VI. CLAIM CONSTRUCTION

Claim terms should be given “their ordinary and customary meaning” as would be understood by a POSA in question at the time of the invention, in light of the claim language, the specification, and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). In this motion, PO applies the ordinary and customary meaning of the claim terms of the substitute claims. *See* Ex. 2001, ¶¶53, 131. The Board, however, only construes the claims when necessary to resolve the underlying controversy. *See Toyota Motor Corp. v. Cellport Systems, Inc.*, IPR2015-00633, Paper 11 at 16 (P.T.A.B. Aug. 14, 2015). For purposes of this motion, PO believes there is no need to construe any terms of the Substitute Claims, as there is not any underlying controversy regarding any terms. Pet., 8.

VII. THE SUBSTITUTE CLAIMS ARE PATENTABLE OVER THE ART

Although PO does not bear the burden of persuasion or production regarding the patentability of the substitute claims, PO nevertheless sets forth reasons why the art does not teach or suggest the amended subject matter. *Aqua Products, Inc. v. Matal*, 872 F.3d 1290, 1296 (Fed. Cir. 2017). Ex. 2001, ¶¶138-146.

A. The Substitute Claims Are Patentable Over the Instituted Art in this Proceeding.

Claim 85 (substitute for claim 45): Claim 85 further narrows claim 45, as discussed above in § III. Ex. ¶138. For claim 45, the Petition relies on Buibas in view of Sinyavskiy in Ground 1A, mapping Buibas’s neural network to the claimed “knowledgebase” that “includes an ‘interface’ or ‘connections’ ... that allow the [neural network] to receive encoded sensory signals and information about the environment, thereby allowing the robot to react appropriately based on the circumstance.,” and “issue[s] ‘commands’ ... to motors and other components of the robot that cause the robot to carry out a task/behavior defined by” the neural network. Pet., 21, 23; *see also* Pet., 17-29. The Petition maps Buibas’s “sensory inputs” and a generated “encoded signal” to the claimed “circumstance representation.” Pet., 32-33. The Petition maps Sinyavskiy’s “partitioned network” to the claimed “correlation between the one or more inputs and the one or more instruction sets for operating” a device. Pet., 24-26, 34-36 (citing Ex. 1006, Fig. 6A). But the combination does not disclose, by such images or any other disclosure, all the features added via amendment—(1) generating a stream of circumstance representations comprising multiple object representation data structures that include type labels, coordinates, and a computer model for object size for *multiple objects*, each at a different first and second time; **AND** (2) determining instruction sets for second and third devices by inputting the claimed multiple object

representation data structures of the stream into the one or more input neurons and using correlations between the same input neurons and one or more instruction sets according to the claimed manner. Ex. 2001, ¶139.

Regarding (1), the Buibas-Sinyavskiy combination does not disclose or suggest the claimed multiple object representation data structures for multiple objects in each of the circumstance representations in a stream of circumstance representations detected at a first and second time, much less object representation data structures that each includes a label for object type, coordinates for object location, and a computer model for object size. Neither reference discloses a generated stream of circumstance representations including circumstance representations representing *multiple objects* at a given time. Ex. 2001, ¶140.

Regarding (2), the combination does not disclose or suggest determining instruction sets for operating each of a second and third device by inputting different multiple object representation data structures (*i.e.*, circumstance representations) of a stream of circumstance representations into the claimed input neurons *and* using a correlation between the same input neurons and the instruction sets. Ex. 2001, ¶141. Though the Petition asserts that element [45.6] is disclosed by the combination, *see* Pet., 34-36, it (1) does not address determining instruction sets for operating the second device based on inputting multiple object representation data structures of the stream into the input neurons and (2) does not address determining instruction

sets for operating the third device based on inputting another multiple object representation data structures of the stream into the input neurons. Ex. 2001, ¶141.

The Petition asserts anticipation by Grotmol in Ground 2A, mapping Grotmol's "adaptive controller" to the claimed "knowledgebase," whereby an "'interface' ... [is] configured to receive a selected set of 'input features' ... extracted from 'sensory input'" and is correlated with motor commands. Pet., 56-57, 63-68. Ex. 2001, ¶142. However, Grotmol does not disclose any of the aforementioned features added via amendment to Substitute Claim 85:

- (1) A stream of "generated circumstance representation[s] that (i) include[] multiple object representation data structures that each comprise[]: a label for object type, coordinates for object location, and a computer model for object size, and (ii) represent[] multiple objects detected at a first [and second] time." Grotmol discloses no such data structures, much less ones including the specific fields: object type, location, and size. Ex. 2001, ¶143.
- (2) Determining instruction sets for operating each of a second and third device by inputting multiple object representation data structures (*i.e.*, circumstance representations) of the stream into the claimed input neurons *and* using correlations between the same input neurons and the instruction sets. Though Grotmol discloses "stored input features ... correlated with specific outputs," Pet., 58, this does not disclose multiple object representation data

structures being inputted into input neurons and correlations between the input neurons and the instruction sets for operating the second and third devices being used for determining these instruction sets. Ex. 2001, ¶143.

Further, though the Petition relies upon its earlier § 102 (Grotmol) analysis for claim 45 in Ground 2C, Pet., 80, 82, Grotmol-Buibas does not render Substitute Claim 85 obvious because these references do not disclose or suggest all the elements of the substitute claim in their claimed configuration. Ex. 2001, ¶144. Further, a POSA would not have been motivated or found it predictable to modify Grotmol in view of Buibas to arrive at claim 85. Nothing in Grotmol, or in Buibas, discloses or suggests modifying Grotmol to arrive at the amended claim. *Id.*

Claims 86-91: Claims 86-91 rewrite certain challenged dependent claims so that they ultimately depend from amended claim 85. As listed in Appendix A, *infra*, these claims do not introduce new subject matter. Therefore, for the reasons discussed above regarding claim 85, the various prior art grounds do not disclose or suggest all the limitations of claims 86-91. Ex. 2001, ¶145.

Claims 92/93: As explained above in §§ II and III.B, in order for the Board to consider Substitute Claims 92/93, it would first have to find that claims 56/57 are patentable over the prior art asserted in the Petition. Thus, Substitute Claims 92/93 are also patentable over the asserted art because they retain the exact scope of the

original claims 56/57 and merely rewrite them in independent form, including all the limitations of the base claim and intervening claim. Ex. 2001, ¶146.

B. The Substitute Claims Are Patentable Over the Art of Record From Prosecution.

As noted in § V, PO presumes Petitioner has set forth in the Petition what it believed to be the closest prior art, and that does not include any prior art of record from prosecution. The claims that issued as the '474 patent were allowed by the Examiner, and the Examiner specifically noted that the “[p]rior art does not disclose the specific limitations such as the use of circumstance representations as claimed, knowledgebase as claimed, and autonomous operating of a first device or a second device based on incoming circumstance representation being inputted into inputs of the knowledgebase correlated with instruction sets for the first device.” Ex. 1007, 77-78. The substitute claims that further narrow the original claims are also patentable over art from original prosecution: Substitute Claim 85 adds further limitations regarding the claimed “generated circumstance representation[s],” “knowledgebase,” and “correlation between the one or more inputs and the one or more instruction sets.” Appx. A at [85.8]-[85.14]; Ex. 2001, ¶133.

C. The Substitute Claims Are Patentable Over the Art at Issue in Other IPR Petitions.

The Substitute Claims are also patentable over all other prior art identified in the petitions in IPR2023-{01054, 01055, 01169, 01172, 01173}. The prior art

references in those proceedings (*i.e.*, U.S. Patent 8,639,644 (“Hickman”), U.S. Patent 8,142,268 (“Thomas”), U.S. Patent 7,399,224 (“Hirai”), U.S. Patent Pub. 2020/006366 (“Tolstedt”), U.S. Patent 9,434,072 (“Buehler”)) do not disclose or suggest all the limitations of claims 85-96. For example, none of these references disclose or suggest the added limitations regarding the stream of circumstance representations with multiple specific object representation data structures at specific different times, and determining instruction sets for operating each of a second and third device by inputting the multiple object representation data structures of the stream into the claimed input neurons *and* using correlations between the same input neurons and the instruction sets, in the context of claim 85 as a whole. To the extent Petitioner disagrees, and given Petitioner’s burden, 37 C.F.R. § 41.121(d)(2), PO will respond at the appropriate time.

VIII. CONCLUSION

For the reasons presented above, in the event the Board finds claim 45 unpatentable, PO requests that the Board issue Substitute Claim 85, and issue Substitute Claims 86-88 and 91 corresponding to original claims 46, 47, 51, and 60. In the event the Board finds claims 56/57 unpatentable, PO requests that the Board issue Substitute Claims 89/90. If the Board instead finds claims 56/57 patentable, PO requests that the Board issue Substitute Claims 92/93. Further, PO requests preliminary guidance from the Board regarding this motion to amend.

Date: January 17, 2025

Respectfully submitted,

/s/ Arvind Jairam

Arvind Jairam

Reg. No. 62,759

ajairam@mckoolsmith.com

Stuart McCommas

Reg. No. 71,834

smccommas@mckoolsmith.com

MCKOOL SMITH, P.C.

1717 K St. NW, Suite 1000

Washington, DC 20006

Telephone: (202) 370-8300

Facsimile: (202) 370-8344

Scott W. Hejny

Reg. No. 45,882

shejny@mckoolsmith.com

MCKOOL SMITH, P.C.

300 Crescent Court, Suite 1200

Dallas, TX 75201

Telephone: (214) 978-4000

Facsimile: (214) 978-4044

George Fishback

Reg. No. 76,345

GFishback@mckoolsmith.com

MCKOOL SMITH, P.C.

303 Colorado Street, Suite 2100

Austin, TX 78701

Telephone: (512) 692-8700

Facsimile: (512) 692-8744

*Counsel for Patent Owner
Autonomous Devices, LLC*

CERTIFICATION OF PAGE LIMIT

The undersigned hereby certifies that the above-captioned **PATENT OWNER'S CONTINGENT MOTION TO AMEND** complies with the page limits of § 42.24(a) because it does not contain more than 25 pages. This paper also complies with the typeface requirements of 37 C.F.R. § 42.6(a)(2)(ii) and the type style requirements of 37 C.F.R. § 42.6(a)(2)(iii) and (iv).

Dated: January 17, 2025

/s/ Arvind Jairam

Arvind Jairam

Reg. No. 62,759

*Counsel for Patent Owner
Autonomous Devices, LLC*

CERTIFICATION OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S CONTINGENT MOTION TO AMEND** and supporting exhibits have been served on Petitioner via email on the following counsel of record for Petitioner:

W. Karl Renner
Nicholas W. Stephens
Usman Khan
Matthew Colvin
Fish & Richardson P.C.
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
Email: IPR49649-0030IP1@fr.com

Ashraf Fawzy
Tesla, Inc.
800 Connecticut Ave NW
Washington DC 20006
afawzy@tesla.com

Dated: January 17, 2025

By: /s/ Arvind Jairam

Arvind Jairam
Reg. No. 62,759

*Counsel for Patent Owner
Autonomous Devices, LLC*

APPENDIX A – SUBSTITUTE CLAIMS

Claim 85 (Proposed substitute for claim 45, if claim 45 is found unpatentable):

[85.pre] A first device comprising:

[85.1] a knowledgebase that includes one or more inputs for inputting at least a portion of a circumstance representation, wherein the one or more inputs are correlated with one or more instruction sets for operating a second device;

[85.2] one or more sensors;

[85.3] one or more processors; and

[85.4] one or more non-transitory machine readable media storing machine readable code that, when executed by the one or more processors, causes the one or more processors to perform at least:

[85.5] generating a circumstance representation, wherein the generated circumstance representation represents a circumstance detected at least in part by the one or more sensors;

[85.6] determining the one or more instruction sets for operating the second device at least by: inputting at least a portion of the generated circumstance representation into the one or more inputs, and using a correlation between the one or more inputs and the one or more instruction sets for operating the second device; and

[85.7] at least in response to the determining, executing the one or more instruction sets for operating the second device, wherein the first device autonomously performs one or more operations defined by the one or more instruction sets for operating the second device;

[85.8] wherein the knowledgebase includes a neural network, wherein the one or more inputs are one or more input neurons of the neural network,

[85.9] wherein the machine readable code, when executed by the one or more processors, further causes the one or more processors to perform at least:

[85.10] generating a stream of circumstance representations comprising:

[85.11] the generated circumstance representation that (i) includes multiple object representation data structures that each comprises: a label for object type, coordinates for object location, and a computer model for object size, and (ii) represents multiple objects detected at a first time, and

[85.12] another circumstance representation that (i) includes another multiple object representation data structures that each includes: a label for object type, coordinates for object location, and a computer model for object size, and (ii) represents the multiple objects detected at a second time,

[85.13] wherein the determining the one or more instruction sets for operating the second device includes: inputting the multiple object representation

data structures of the stream into the one or more input neurons, and using a correlation between the one or more input neurons and the one or more instruction sets for operating the second device; and

[85.14] determining another one or more instruction sets for operating a third device at least by: inputting the another multiple object representation data structures of the stream into the one or more input neurons, and using a correlation between the one or more input neurons and the another one or more instruction sets for operating the third device.

Claim 86 (Proposed substitute for claim 46, if claim 45 is found unpatentable):

[86.pre] The first device of claim [[45]]85,

[86.1] wherein the one or more inputs for inputting the at least the portion of the circumstance representation include one or more inputs for inputting at least a portion of one or more object representations, and wherein the generated circumstance representation includes one or more object representations, and

[86.2] wherein the first device is a first vehicle, and wherein the second device is a second vehicle.

Claim 87 (Proposed substitute for claim 47, if claim 45 is found unpatentable):

[87.pre] The first device of claim [[46]]86,

[87.1] wherein at least an information related to the one or more instruction sets for operating the second device is learned in a learning process that includes

operating the second device at least partially by a user.

Claim 88 (Proposed substitute for claim 51, if claim 45 is found unpatentable):

[88.pre] The first device of claim [[46]]86,

[88.1] wherein at least a portion of the one or more instruction sets for operating the second device is learned in a learning process that includes operating the second device at least partially by a user.

Claim 89 (Proposed substitute for claim 56, if claim 56 found *unpatentable*):

[89.pre] The first device of claim [[46]]86,

[89.1] wherein the one or more inputs are further correlated with another one or more instruction sets for operating a third device, and

[89.2] wherein at least a portion of the one or more instruction sets for operating the second device or at least an information related to the one or more instruction sets for operating the second device is learned in a learning process that includes operating the second device at least partially by a user, and wherein at least a portion of the another one or more instruction sets for operating the third device or at least an information related to the another one or more instruction sets for operating the third device is learned in another learning process that includes operating the third device at least partially by another user.

Claim 90 (Proposed substitute for claim 57, if claim 57 found *unpatentable*):

[90.pre] The first device of claim [[46]]86,

[90.1] wherein the one or more inputs are further correlated with another one or more instruction sets for operating a third device.

Claim 91 (Proposed substitute for claim 60, if claim 45 is found unpatentable):

[91.pre] The first device of claim [[46]]86,

[91.1] wherein the one or more object representations of the generated circumstance representation include one or more coordinates of one or more objects.

Claim 92 (Proposed substitute for claim 56, if claim 56 found *patentable*):

[92.pre] A first device comprising:

[92.1] a knowledgebase that includes one or more inputs for inputting at least a portion of a circumstance representation, wherein the one or more inputs are correlated with one or more instruction sets for operating a second device;

[92.2] one or more sensors;

[92.3] one or more processors; and

[92.4] one or more non-transitory machine readable media storing machine readable code that, when executed by the one or more processors, causes the one or more processors to perform at least:

[92.5] generating a circumstance representation, wherein the generated circumstance representation represents a circumstance detected at least in part by the one or more sensors;

[92.6] determining the one or more instruction sets for operating the second device at least by: inputting at least a portion of the generated circumstance representation into the one or more inputs, and using a correlation between the one or more inputs and the one or more instruction sets for operating the second device; and

[92.7] at least in response to the determining, executing the one or more instruction sets for operating the second device, wherein the first device autonomously performs one or more operations defined by the one or more instruction sets for operating the second device; and

[92.8] wherein the one or more inputs for inputting the at least the portion of the circumstance representation include one or more inputs for inputting at least a portion of one or more object representations, and wherein the generated circumstance representation includes one or more object representations, and

[92.9] wherein the first device is a first vehicle, and wherein the second device is a second vehicle; and

[92.10] wherein the one or more inputs are further correlated with another one or more instruction sets for operating a third device, and

[92.11] wherein at least a portion of the one or more instruction sets for operating the second device or at least an information related to the one or more instruction sets for operating the second device is learned in a learning process that

includes operating the second device at least partially by a user, and wherein at least a portion of the another one or more instruction sets for operating the third device or at least an information related to the another one or more instruction sets for operating the third device is learned in another learning process that includes operating the third device at least partially by another user.

Claim 93 (Proposed substitute for claim 57, if claim 57 found *patentable*):

[93.pre] A first device comprising:

[93.1] a knowledgebase that includes one or more inputs for inputting at least a portion of a circumstance representation, wherein the one or more inputs are correlated with one or more instruction sets for operating a second device;

[93.2] one or more sensors;

[93.3] one or more processors; and

[93.4] one or more non-transitory machine readable media storing machine readable code that, when executed by the one or more processors, causes the one or more processors to perform at least:

[93.5] generating a circumstance representation, wherein the generated circumstance representation represents a circumstance detected at least in part by the one or more sensors;

[93.6] determining the one or more instruction sets for operating the second device at least by: inputting at least a portion of the generated circumstance

representation into the one or more inputs, and using a correlation between the one or more inputs and the one or more instruction sets for operating the second device; and

[93.7] at least in response to the determining, executing the one or more instruction sets for operating the second device, wherein the first device autonomously performs one or more operations defined by the one or more instruction sets for operating the second device; and

[93.8] wherein the one or more inputs for inputting the at least the portion of the circumstance representation include one or more inputs for inputting at least a portion of one or more object representations, and wherein the generated circumstance representation includes one or more object representations, and

[93.9] wherein the first device is a first vehicle, and wherein the second device is a second vehicle; and

[93.10] wherein the one or more inputs are further correlated with another one or more instruction sets for operating a third device.