

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOUGHBUILT INDUSTRIES, INC.,
Petitioner,
v.
MERIDIAN INTERNATIONAL CO., LTD.,
Patent Owner.

Case IPR2025-01461
Patent 11,986,946

**PATENT OWNER'S CONTINGENT MOTION TO AMEND
UNDER 37 C.F.R. § 42.121**

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. STATEMENT OF THE PRECISE RELIEF REQUESTED	2
III. THE SUBSTITUTE CLAIMS MEET ALL THE REQUIREMENTS OF 37 C.F.R. § 42.121.....	2
A. The Substitute Claims Do Not Enlarge The Claim Scope.....	2
B. Meridian Proposes A Reasonable Number of Substitute Claims.....	4
C. The Substitute Claims Do Not Introduce New Matter.....	4
D. The Substitute Claims Each Respond To One Or More Grounds Of Unpatentability In This Proceeding.	5
IV. THE SUBSTITUTE CLAIMS DO NOT ADD NEW SUBJECT MATTER.....	5
V. LEVEL OF ORDINARY SKILL IN THE ART	8
VI. CLAIM CONSTRUCTION	9
VII. THE SUBSTITUTE CLAIMS RESPOND TO AND OVERCOME THE ASSERTED GROUNDS OF UNPATENTABILITY OF RECORD	9
A. Substitute Independent Claim 17 Is Patentable Over The Cited Art.....	9
1. Substitute Claim 17 Is Patentable Over Li.....	10
2. Substitute Claim 17 is Patentable Over Baruch.....	14
B. Substitute Dependent Claims 18-26 Are Patentable Over The Cited Art.	18
C. Substitute Independent Claim 27 Is Patentable Over The Cited Art.....	19

1.	Substitute Claim 27 Is Patentable Over Li.....	19
2.	Substitute Claim 27 is Patentable Over Baruch.....	20
D.	Substitute Dependent Claims 28-30 Are Patentable Over The Cited Art.	21
E.	Substitute Independent Claim 31 Is Patentable Over The Cited Art.....	21
1.	Substitute Claim 31 Is Patentable Over Li.....	22
2.	Substitute Claim 31 is Patentable Over Baruch.....	23
F.	Substitute Dependent Claim 32 Is Patentable Over The Cited Art.....	24
VIII.	CONCLUSION.....	24

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Aqua Prods., Inc. v. Matal</i> , 872 F.3d 1290 (Fed. Cir. 2017) (en banc)	1, 9
<i>In re Bass</i> , 314 F.3d 575 (Fed. Cir. 2002)	9
<i>Corning Optical Commc’ns RF, LLC v. PPC Broadband, Inc.</i> , 2014 WL 5477766	4
<i>L&P Prop. Mgmt. Co. v. Remacro Mach. & Tech. (Wujiang) Co.</i> , 2019 WL 2521255	2
<i>Microsoft Corp. v. Biscotti, Inc.</i> , 878 F.3d 1052 (Fed. Cir. 2017)	13, 17
<i>Western Digital Corp. v. SPEX Technologies, Inc.</i> , 2018 WL 1989599	1
Statutes	
35 U.S.C. § 316(d)	1, 2
35 U.S.C. § 316(d)(1)(B)	4
35 U.S.C. § 316(d)(3).....	2
Other Authorities	
37 C.F.R. § 42.121	<i>passim</i>

UPDATED EXHIBIT LIST		
2001	Declaration of Ann G. Fort	Sept. 19, 2025
2002	June 5, 2024 Notice Letter	Nov. 10, 2025
2003	Meridian International v. ToughBuilt Minutes of Hearing RE: Scheduling Conference (Docket No. 80)	Nov. 10, 2025
2004	March 24, 2025 PTAB Memo On IPR Proceedings	Nov. 10, 2025
2005	March 26, 2025 PTAB Memo on Interim Processes	Nov. 10, 2025
2006	<i>Meridian International v. ToughBuilt</i> First Amended Invalidity Contentions	Nov. 10, 2025
2007	Interim Director Discretionary Processes (Oct. 3, 2025)	Nov. 10, 2025
2008	U.S. Patent No. 11,642,777 (“Baruch”)	Nov. 10, 2025
2009	FAQs for Interim Processes	Nov. 10, 2025
2010	<i>Meridian International v. ToughBuilt</i> Declaration of John D. Pratt, Ph.D., P.E.	Dec. 9, 2025
2011	<i>Meridian International v. ToughBuilt</i> [Tentative] Claim Construction Order	Dec. 9, 2025

UPDATED EXHIBIT LIST		
2012	Declaration of Glenn E. Vallee, Ph.D., P.E.	May 20, 2026
2013	Curriculum Vitae of Glenn E. Vallee, Ph.D., P.E.	May 20, 2026
2014	Transcript of May 13, 2026 Deposition of J. Michael McCarthy, Ph.D.	May 20, 2026
2015	U.S. Patent Application No. 18/518,200 to Zhang et al. (the "'200 Application")	May 20, 2026
2016	U.S. Patent Application No. 18/176,907 to Zhang et al. (the "'907 Application")	May 20, 2026
2017	CN Patent Application No. 202210212862.5 to Zhang et al. (the "CN '862 Application")	May 20, 2026
2018	Chinese Patent Application No. 202320135456.3 to Zhang et al. (the "CN '456 Application")	May 20, 2026
2019	Certified English Translation of the CN '862 Application	May 20, 2026
2020	Certified English Translation of the CN '456 Application	May 20, 2026

I. INTRODUCTION

Pursuant to 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121, Patent Owner Meridian International Co., Ltd. (“Meridian”) submits this contingent motion to substitute proposed claims 17-32 for original claims 1-16 (collectively, the “Challenged Claims”) of U.S. Patent No. 11,986,946 (the “’946 Patent”) should the Board find any of the Challenged Claims to be unpatentable. In such an event, Meridian respectfully requests that the ’946 Patent be amended to include the corresponding substitute claims (collectively, the “Substitute Claims”) attached in Appendix A. While Petitioner has the burden of showing that the amended claims are unpatentable over the prior art, Meridian nonetheless asserts that no combination of the prior art of record teaches or suggests the subject matter of the Substitute Claims. 37 C.F.R. § 42.121(d)(2); *see also Aqua Prods., Inc. v. Matal*, 872 F.3d 1290, 1324 (Fed. Cir. 2017) (en banc).

Meridian conferred with the Board on May 4, 2026, as required by 37 C.F.R. § 42.121(a)(1). Meridian also requests nonbinding preliminary guidance from the Board on this Motion to Amend.

As explained below, Meridian satisfies the requirements for a motion to amend as set forth in 37 C.F.R. § 42.121 and *Western Digital Corp. v. SPEX Technologies, Inc.*, 2018 WL 1989599, IPR2018-00082, Paper No. 13 (P.T.A.B.

Apr. 25, 2018) (informative) because the Substitute Claims: (1) do not impermissibly enlarge claim scope; (2) correspond one-to-one with the Challenged Claims and therefore are a reasonable number of substitute claims; (3) do not introduce new subject matter; and (4) respond to a ground of unpatentability in the trial. Meridian has therefore satisfied its burden of production associated with the present Motion. 35 U.S.C. § 316(d); 37 C.F.R. § 42.121(d)(1).

II. STATEMENT OF THE PRECISE RELIEF REQUESTED

Meridian respectfully requests that the Board grant this Motion to Amend and substitute claims 17-32 for original claims 1-16 of the '946 Patent should the Board find any of the Challenged Claims to be unpatentable. The Board should not consider this motion for any Challenged Claims it finds patentable.

III. THE SUBSTITUTE CLAIMS MEET ALL THE REQUIREMENTS OF 37 C.F.R. § 42.121

As set forth below, the Substitute Claims meet all the requirements of 37 C.F.R. § 42.121. The Board should therefore consider whether the Substitute Claims are unpatentable by a preponderance of the evidence. *L&P Prop. Mgmt. Co. v. Remacro Mach. & Tech. (Wujiang) Co.*, 2019 WL 2521255, at *2, IPR2019-00255, Paper 15 at 6 (P.T.A.B. Jun. 18, 2019).

A. The Substitute Claims Do Not Enlarge The Claim Scope.

The Substitute Claims do not enlarge the claim scope. 35 U.S.C. §

316(d)(3); 37 C.F.R. § 42.121(a)(2)(ii). As shown in Appendix A, substitute independent claim 17 further limits original claim 1 by adding that the “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between said mounting body and said locking part, wherein the locking part is at least partially received within and movable with respect to the mounting body” and that “the locking part is configured to slide inward with respect to the mounting body.”

Substitute independent claim 27 further limits original claim 11 by adding that the “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between said mounting body and said locking part, wherein the mounting body is configured to receive at least a portion of the locking part therein and wherein the locking part is moveable with respect to the mounting body” and that “the locking part is configured to slide inward with respect to the mounting body.”

Substitute independent claim 31 further limits original claim 15 by adding that the “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between the mounting body and the locking part, wherein the locking part is configured to slide within the mounting body,” and that “the locking part [is] configured to move

along a horizontal locking path relative to the mounting body.”

Each of substitute independent claims 17, 27, and 31 retain all limitations of their corresponding original claims 1, 11, and 15.

Substitute dependent claims 18-26, 28-30, and 32 are amended only to reflect new dependencies from the amended substitute independent claims.

The Substitute Claims therefore do not enlarge the scope of any original claim. *See* 37 C.F.R. § 41.121(a)(2)(ii).

B. Meridian Proposes A Reasonable Number of Substitute Claims.

A patent owner must “propose a reasonable number of substitute claims.” 35 U.S.C. § 316(d)(1)(B) and 37 C.F.R. § 42.121(a)(3). There exists a “presumption ... that only one substitute claim will be needed to replace each challenged claim.” 37 C.F.R. § 42.121(a)(3); 35 U.S.C. § 316(d)(1)(B); *Corning Optical Commc 'ns RF, LLC v. PPC Broadband, Inc.*, 2014 WL 5477766, IPR2014-00441, Paper 19 at 3 (P.T.A.B. Oct. 30, 2014) (“The presumption is that only one substitute claim is needed for each original patent claim.”). As set forth in the claim listing attached at Appendix A, Meridian proposes only one substitute claim for each Challenged Claim. Accordingly, Meridian presents a reasonable number of substitute claims.

C. The Substitute Claims Do Not Introduce New Matter.

As set forth in greater detail below in Section IV, the Substitute Claims are supported by the original applications to which the '946 Patent claims priority and

therefore do not introduce any new subject matter. See 37 C.F.R. § 42.121(a)(2)(ii).

D. The Substitute Claims Each Respond To One Or More Grounds Of Unpatentability In This Proceeding.

As set forth in greater detail below in Section VII, the Substitute Claims are responsive to one or more grounds of unpatentability in this proceeding. *See* 37 C.F.R. § 42.121(a)(2)(i).

IV. THE SUBSTITUTE CLAIMS DO NOT ADD NEW SUBJECT MATTER

The '946 Patent issued on May 21, 2024 from U.S. Patent Application No. 18/518,200 (the "'200 Application") (**Exhibit 2015**) which is a continuation of U.S. Patent Application 18/176,907 (the "'907 Application") (**Exhibit 2016**) and claims priority to Chinese Patent Application No. 202210212862.5 (the "CN '862 Application") (**Exhibit 2017**) and Chinese Patent Application No. 202320135456.3 (the "CN '456 Application") (**Exhibit 2018**).¹

The limitations Meridian proposes to add to the Substitute Claims come

¹ English language translations of the CN '862 Application and the CN '456 Application are submitted herewith as **Exhibit 2019** and **Exhibit 2020**, respectively, and all citations to the CN '862 Application and the CN '456 Application are made with reference to the English translations thereof.

directly from the '946 Patent's original disclosure. This support can also be found in the '200 Application, the '907 Application, the CN '862 Application, and the CN '456 Application. As demonstrated below and in the accompanying Declaration of Dr. Glenn E. Vallee, Ph.D., P.E., a POSA would have understood, based on the disclosure of the CN '862 Application and the CN '456 Application, that the inventors possessed the Substitute Claims as of the respective filing dates of the CN '862 Application and the CN '456 Application, such that no new matter has been introduced by the amendments set forth in the Substitute Claims. (**Exhibit 2012**, ¶146.)

Support for the added limitation in substitute independent claim 17 that the “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between said mounting body and said locking part, wherein the locking part is at least partially received within and movable with respect to the mounting body” and that “the locking part is configured to slide inward with respect to the mounting body” may be found in:

- Col. 6, line 53 to col. 7, line 20 of the '946 Patent (**Exhibit 1001**, 21-22)
- Page 9, 2nd full paragraph through page 10, 1st partial paragraph of the CN '862 Application (**Exhibit 2019**, 12-13)
- FIGS. 6-7 of the '946 Patent (**Exhibit 1001**, 6) and FIGS. 6-7 of the CN

'862 Application (**Exhibit 2019**, 22), which demonstrate that the locking part is partially received within the mounting body.

Support for the added limitation in substitute independent claim 27 that the “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between said mounting body and said locking part, wherein the mounting body is configured to receive at least a portion of the locking part therein and wherein the locking part is movable with respect to the mounting body” and that “the locking part is configured to slide inward with respect to the mounting body” may be found in:

- Col. 6, line 53 to col. 7, line 20 of the '946 Patent (**Exhibit 1001**, 21-22)
- Page 9, 2nd full paragraph through page 10, 1st partial paragraph of the CN '862 Application (**Exhibit 2019**, 12-13)
- FIGS. 6-7 of the '946 Patent (**Exhibit 1001**, 6) and FIGS. 6-7 of the CN '862 Application (**Exhibit 2019**, 22), which demonstrate that the locking part is partially received within the mounting body.

Support for the added limitation in substitute independent claim 31 that the “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between the mounting body and the locking part, wherein the locking part is configured to slide within the

mounting body” and that “the locking part is configured to move along a horizontal locking path relative to the mounting body” may be found in:

- Col. 6, line 53 to col. 7, line 20 of the '946 Patent (**Exhibit 1001**, 21-22)
- Page 9, 2nd full paragraph through page 10, 1st partial paragraph of the CN '862 Application (**Exhibit 2019**, 12-13)
- FIGS. 6-7 of the '946 Patent (**Exhibit 1001**, 6) and FIGS. 6-7 of the CN '862 Application (**Exhibit 2019**, 22), which demonstrate that the locking part is partially received within the mounting body.

Substitute dependent claims 18-26, 28-30, and 32 are amended only to reflect new dependencies from the amended substitute independent claims, and do not add any new matter.

V. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art would have “at least the equivalent of an undergraduate degree in mechanical engineering, or a closely related field, and two years of industry or academic experience with connecting technologies or similar mechanisms, or an equivalent combination of education and experience. Additional relevant industry experience may compensate for lack of formal education or vice versa.” (**Exhibit 2012**, ¶30; see also **Exhibit 2010**, Declaration of John D. Pratt, Ph.D., P.E. at 2.)

VI. CLAIM CONSTRUCTION

Meridian does not believe that any of the limitations added to the Substitute Claims require construction and that these limitations should be construed in accordance with their ordinary meaning. *In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002). If Petitioner proposes a construction for any claim term, however, Meridian reserves the right to propose an alternative construction for that term.

VII. THE SUBSTITUTE CLAIMS RESPOND TO AND OVERCOME THE ASSERTED GROUNDS OF UNPATENTABILITY OF RECORD

The Substitute Claims respond to the grounds of unpatentability involved in the trial. 37 C.F.R. § 42.121(a)(2)(i). The burden of establishing the unpatentability of the amended claims is on Petitioner. 37 C.F.R. § 42.121(d)(2); see also *Aqua Prods.*, 872 F.3d at 1327-28. In any event, as set forth below, Meridian's claim amendments overcome the grounds of record because they further distinguish the claims from the art of record.

A. Substitute Independent Claim 17 Is Patentable Over The Cited Art.

Petitioner challenged claim 1 of the '946 Patent as anticipated by, and obvious over, U.S. Publication No. 2022/0396985 to Li et al. ("Li") (**Exhibit 1007**). (Petition, Paper 2 at 16-46 and 65.) Petitioner further challenged claim 1 as being anticipated by, and obvious over, U.S. Publication No. 2020/0298392 to Baruch et al. ("Baruch") (**Exhibit 1012**). (Petition, Paper 2 at 99-117 and 145.)

Meridian disagrees for the reasons set forth in its Patent Owner Response (the “Response”), filed concurrently herewith.

Nonetheless, substitute claim 17 is patentable over Li and Baruch for the following reasons.

1. Substitute Claim 17 Is Patentable Over Li.

Li does not anticipate or render obvious substitute claim 17 because it fails to teach or suggest a “first connection part compris[ing] a mounting body, a locking part comprising a locking buckle, and a first resilient member located between the mounting body and the locking part, wherein the locking part is at least partially received within and movable with respect to the mounting body.” (Exhibit 2012, ¶¶148-150.)

Petitioner alleges that Li has a first connection part having a mounting body, a locking buckle, and a first resilient member located between the mounting body and the locking buckle (Petition, Paper 2 at 12-33); however, these arguments rely upon a strained construction of the terms “mounting body” and “locking buckle” in order to fabricate the presence of a “first resilient member located between said mounting body and said locking buckle.” As discussed more fully in the Response, Petitioner’s interpretations of these terms rely on imported limitations from the specification of the ’946 Patent, and therefore necessarily are not based on plain

and ordinary meaning. This was confirmed by Petitioner's expert, who conceded that the specification of the '964 Patent was used to interpret the terms "mounting body" and "locking buckle." (**Exhibit 2014**, 30:20-32:7 and 37:13-38:8.) However, reliance on the specification of the '946 Patent is not necessary, as both "mounting body" and "locking buckle" have meanings that would be understood by a POSA without referencing the '946 Patent's specification. (**Exhibit 2012**, ¶¶70-81.)

Regarding the "mounting body," Petitioner alleges that "Li's 'stop piece 35' as attached to 'chute 21' via 'snap-in hole 211' teaches the claimed 'mounting body.'" (Petition, Paper 27 at 27) (*see* **Exhibit 1007**, at FIG. 3 and 5.) This interpretation of the "mounting body" is unduly narrow and contradicts the plain and ordinary meaning of the term "mounting body." Petitioner's expert contends that, based on the specification of the '946 Patent, "mounting body" includes "whatever parts are required [] to create the structure that holds the latch to the storage box." (**Exhibit 2014**, 30:20-32:7.) However, a POSA would understand that, contrary to the assertions of Petitioner's expert, "mounting body" has a plain and ordinary meaning, which is the portion of the first connection part attached to the body of the storage container relative to which the locking buckle slides. (**Exhibit 2012**, ¶72.) The mounting body does not include any additional structures, or any components of the locking buckle and/or locking part that attach

the locking buckle and/or the locking part to the mounting body. (*Id.*, ¶¶72-73.)

Petitioner's interpretation of the "mounting body" incorporates additional structure that goes beyond the scope of the broadest reasonable interpretation of the term used in the '946 Patent. Petitioner provides no support or evidence for this interpretation, and does not provide any reasonable explanation as to why the "mounting body" should also be considered to include the snap-in hole 211 and the stop pieces 35, when the broadest reasonable interpretation of "mounting body" is that it is just the chute 21 of Li.

Regarding the "locking buckle," substitute claim 17 recites that the locking **part comprises a locking buckle**, with the locking **part** being moveable relative to and partially received within the mounting body, and that the first resilient member is located between the mounting body and the locking **part**. Petitioner alleges that the elastic pull latch 3 of Li teaches the "locking part" (Petition, Paper 2 at 38-42), but (1) the elastic pull latch 3 of Li is not at least partially received within the chute 21, and (2) Li does not teach or suggest a resilient member located between the elastic pull latch 3 and the chute 21.

First, the elastic pull latch 3 is not at least partially received within the chute 21. While the stop pieces 35 are received within the snap-in holes 211, the stop pieces 35 are not part of the "locking part" (*i.e.*, the elastic pull latch 3). At best,

the elastic pull latch 3 is mounted relative to the chute 21, but there is no component of the elastic pull latch 3 that a POSA would consider to be “received within” the chute 21. (**Exhibit 2012**, ¶78.)

Second, Petitioner alleges that the first resilient member is the first spring 34 of Li (Petition, Paper 2 at 30), but the first spring 34 is present **within** the elastic pull latch 3 of Li, not **between** the elastic pull latch 3 and the chute 21 as required by substitute claim 17. A component that is **within** a part cannot also be **between** said part and another part. (**Exhibit 2012**, ¶85.) Indeed, Petitioner's expert conceded that the term “between” refers to an arrangement of parts within an assembly where, in a series of three parts, the second part is between the first and third parts. (**Exhibit 2014**, 38:10-39:11.) In contrast, the term “within” refers to a part that is inside of, or enclosed within, another part. (*Id.*, 40:12-41:15.)

Li therefore fails to teach elements of substitute claim 17 arranged as recited in the claims. *Microsoft Corp. v. Biscotti, Inc.*, 878 F.3d 1052, 1069 (Fed. Cir. 2017) (“a prior art reference must provide every element of the claimed invention arranged as in the claim in order to anticipate”).

Substitute claim 17 is also not obvious over Li. As discussed in the Response, Petitioner's conclusory assertions regarding obviousness, supported only by similarly conclusory statements from Dr. McCarthy, are entirely

insufficient to support a conclusion of obviousness. Petitioner's expert concedes that there is no deficiency in Li that would require modification (**Exhibit 2014**, 45:22-46:18 and 59:9-13), and a POSA would not have been motivated to modify Li to arrive at substitute claim 17. (**Exhibit 2012**, ¶¶111-112.)

For at least these reasons, substitute claim 17 is not anticipated by or obvious over Li.

2. Substitute Claim 17 is Patentable Over Baruch.

Baruch does not anticipate or render obvious substitute claim 17 because it fails to disclose or suggest a “first connection part compris[ing] a mounting body, a locking part comprising a locking buckle, and a first resilient member located between the mounting body and the locking part, wherein the locking part is at least partially received within and movable with respect to the mounting body, ...wherein the locking part is configured to slide inward with respect to the mounting part.” (**Exhibit 2012**, ¶¶151-153.)

Petitioner alleges that Baruch has a first connection part having a mounting body, a locking buckle, and a first resilient member located between the mounting body and the locking buckle (Petition, Paper 2 at 96-106); however, these arguments rely upon a strained construction of the terms “mounting body” and “locking buckle” in order to fabricate the presence of a “first resilient member

located between said mounting body and said locking buckle.” As discussed more fully in the accompanying Response and in Section VII.A.1, Petitioner’s interpretations of the terms “mounting body” and “locking buckle” are based on imported limitations from the specification of the ’946 Patent (**Exhibit 2014**, 30:20-32:7 and 37:13-38:8), and are not based on the plain and ordinary meanings as understood by a POSA. (**Exhibit 2012**, ¶¶93-103.)

Regarding the “mounting body,” Petitioner alleges that Baruch’s pins 334 as mounted in carveout 352 via holes 356 on a lid teach the claimed “mounting body.” (Petition, Paper 2 at 104.) This interpretation of the “mounting body” is unduly narrow and contradictory to the plain and ordinary meaning of the term “mounting body.” As discussed in Section VII.A.1, Petitioner’s expert interprets “mounting body” as requiring all the components for attaching the latch to the storage container (**Exhibit 2014**, 30:20-32:7), when a POSA would understand that “mounting body” refers to only the portion of the first connection part attached to the body of the storage container relative to which the locking buckle slides and does not include any additional structures or components. (**Exhibit 2012**, ¶¶95-96.)

Petitioner’s interpretation of the “mounting body” incorporates additional structure that goes beyond the scope of the broadest reasonable interpretation of the term used in the ’946 Patent. Petitioner provides no support or evidence for this

interpretation, and does not provide any reasonable explanation as to why the “mounting body” should also be considered to include holes 356 and the pins 334, when the broadest reasonable interpretation of “mounting body” is that it is just the carveout 352 of Baruch.

Regarding the “locking buckle,” substitute claim 17 recites that the locking **part comprises a locking buckle**, with the locking **part** being moveable relative to and partially received within the mounting body, and that the first resilient member is located between the mounting body and the locking **part**. Petitioner alleges that the latch mechanism 310 of Baruch teaches the “locking part” (Petition, Paper 2 at 110-112), but (1) the latch mechanism 310 of Baruch is not at least partially received within the carveout 352, (2) Baruch does not teach or suggest a resilient member located between the latch mechanism 310 and the carveout, and (3) the latch mechanism 310 does not slide inward relative to the carveout 352.

First, the latch mechanism 310 is not at least partially received within the carveout 352. While the pins 334 are received within the holes 356, the pins 334 are not part of the “locking part” (*i.e.*, the latch mechanism 310). At best, the latch mechanism 310 is mounted relative to the carveout 352, but there is no component of the latch mechanism 310 that a POSA would consider to be “received within” the carveout 352. (**Exhibit 2012**, ¶100.)

Second, Petitioner alleges that the first resilient member is the latch bias 320 of Baruch (Petition, Paper 2 at 105-106), but the latch bias 320 is not **between** the latching mechanism 310 and the carveout 352. Indeed, as discussed in Section VII.A.1, Petitioner's expert conceded that **between** and **within** have different meanings. (**Exhibit 2014**, 38:10-39:11 and 40:12-41:15.) A POSA would therefore understand that a component that is **within** a part cannot also be **between** said part and another part. (**Exhibit 2012**, ¶¶104-107.)

Third, the latch mechanism 310 does not slide inward relative to the carveout 352 and therefore cannot be a "locking part" as recited in substitute claim 17. Pivoting and sliding are not the same. Sliding implies linear motion, where pivoting is rotational. (*Id.*, ¶¶99-103.) At best, Petitioner attempts to argue that the latch 314 "horizontally slides" by providing annotated figures of Baruch where the top part of the latch 314 is laterally displaced (Petition, Paper 2 at 107-108), but this alone is insufficient to support the conclusion that a **pivoting** latch mechanism 310 **slides** relative to the carveout 352.

Baruch therefore fails to teach elements of substitute claim 17 arranged as recited in the claims. *Microsoft Corp. v. Biscotti, Inc.*, 878 F.3d at 1069 ("a prior art reference must provide every element of the claimed invention arranged as in the claim in order to anticipate").

Substitute claim 17 is also not obvious over Baruch. As discussed in the Response, Petitioner's conclusory assertions regarding obviousness, supported only by similarly conclusory statements from Dr. McCarthy, are entirely insufficient to support a conclusion of obviousness. Petitioner's expert concedes that there is no deficiency in Baruch that would require modification (**Exhibit 2014**, 71:20-72:2), and a POSA would not have been motivated to modify Baruch to arrive at substitute claim 17. (**Exhibit 2012**, ¶¶116-117.)

For at least these reasons, substitute claim 17 is not anticipated by or obvious over Baruch.

B. Substitute Dependent Claims 18-26 Are Patentable Over The Cited Art.

Substitute dependent claims 18-26 depend upon substitute claim 17 and therefore overcome the cited prior art for the same reasons discussed above. Moreover, substitute claims 18-26 are independently patentable over Li and Baruch. As set forth in the Response, none of U.S. Publication No. 2020/0329837 to Baruchia ("Baruchia") (**Exhibit 1008**), U.S. Publication No. 2023/0340804 to Hammond et al. ("Hammond") (**Exhibit 1009**), and/or U.S. Publication No. 2021/0221561 to Davidian et al. ("Davidian") (**Exhibit 1011**) supplement the deficiencies of Li or Baruch.

C. Substitute Independent Claim 27 Is Patentable Over The Cited Art.

Petitioner challenged claim 11 of the '946 Patent as anticipated by, or obvious over, U.S. Publication No. 2022/0396985 to Li et al. ("Li"). (Petition, Paper 2 at 47-50 and 65.) Petitioner further challenged claim 11 as being anticipated by, or obvious over, U.S. Publication No. 2020/0298392 to Baruch et al. ("Baruch"). (Petition, Paper 2 at 117-121 and 145.) Meridian disagrees for the reasons set forth in its Response.

Nonetheless, substitute claim 27 is patentable over Li and Baruch for the following reasons.

1. Substitute Claim 27 Is Patentable Over Li.

Li does not anticipate or render obvious substitute claim 27 because it fails to disclose or suggest a "first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between said mounting body and said locking part, wherein the mounting body is configured to receive at least a portion of the locking part therein and wherein the locking part is movable with respect to the mounting body." (**Exhibit 2012**, ¶¶154-156.)

As discussed in Section VII.A.1, Li does not teach or suggest a first connection part having a mounting body, a locking part, and a first resilient member as recited in substitute claims 17 or 27.

While substitute claim 27 differs from substitute claim 17 in that substitute claim 27 recites that the “mounting body is configured to receive at least a portion of the locking part therein,” this difference in terminology does not affect the patentability of claim 27 over Li. (*Id.*, ¶¶155.) The chute 21 does not receive any part of the elastic pull latch 3. (*Id.*, ¶78.)

For at least these reasons, substitute claim 27 is not anticipated by or obvious over Li.

2. Substitute Claim 27 is Patentable Over Baruch.

Baruch does not anticipate or render obvious substitute claim 27 because it fails to disclose or suggest a “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between said mounting body and said locking part, wherein the mounting body is configured to receive at least a portion of the locking part therein and wherein the locking part is movable with respect to the mounting body...wherein the locking part is configured to slide inward with respect to the mounting body.” (**Exhibit 2012**, ¶¶157-159.)

As discussed in Section VII.A.1, Baruch does not teach or suggest a first connection part having a mounting body, a locking part, and a first resilient member as recited in substitute claims 17 or 27.

While substitute claim 27 differs from substitute claim 17 in that substitute claim 27 recites that the “mounting body is configured to receive at least a portion of the locking part therein,” this difference in terminology does not affect the patentability of claim 27 over Baruch. (*Id.*, ¶158.) The carveout 352 does not receive any part of the latch mechanism 310. (*Id.*, ¶100.)

For at least these reasons, substitute claim 27 is not anticipated by or obvious over Baruch.

D. Substitute Dependent Claims 28-30 Are Patentable Over The Cited Art.

Substitute dependent claims 28-30 depend upon substitute claim 27 and therefore overcome the cited prior art for the same reasons discussed above. Moreover, substitute claims 28-30 are independently patentable over Li and Baruch. As set forth in the Response, none of U.S. Publication No. 2020/0329837 to Baruchia (“Baruchia”), U.S. Publication No. 2023/0340804 to Hammond et al. (“Hammond”), and/or U.S. Publication No. 2021/0221561 to Davidian et al. (“Davidian”) supplement the deficiencies of Li or Baruch.

E. Substitute Independent Claim 31 Is Patentable Over The Cited Art.

Petitioner challenged claim 15 of the '946 Patent as anticipated by, or obvious over, U.S. Publication No. 2022/0396985 to Li et al. (“Li”). (Petition, Paper 2 at 50-56 and 65.) Petitioner further challenged claim 15 as being

anticipated by, or obvious over, U.S. Publication No. 2020/0298392 to Baruch et al. (“Baruch”). (Petition, Paper 2 at 121-134 and 145.) Meridian disagrees for the reasons set forth in its Response.

Nonetheless, substitute claim 31 is patentable over Li and Baruch for the following reasons.

1. Substitute Claim 31 Is Patentable Over Li.

Li does not anticipate or render obvious substitute claim 31 because it fails to disclose or suggest a “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between the mounting body and the locking part, wherein the locking part is configured to slide within the mounting body.” (**Exhibit 2012**, ¶¶160-162.)

As discussed in Section VII.A.1, Li does not teach or suggest a first connection part having a mounting body, a locking part, and a first resilient member as recited in substitute claims 17 or 31.

While substitute claim 31 differs from substitute claim 17 in that substitute claim 31 recites that the “locking part is configured to slide within the mounting body,” this difference in terminology does not affect the patentability of claim 31 over Li. (*Id.*, ¶161.) The elastic pull latch 3 slides relative to the chute 21, but does not slide within the chute 21. (*Id.*, ¶78.)

For at least these reasons, substitute claim 31 is not anticipated by or obvious over Li.

2. Substitute Claim 31 is Patentable Over Baruch.

Baruch does not anticipate or render obvious substitute claim 31 because it fails to disclose or suggest a “first connection part comprises a mounting body, a locking part comprising a locking buckle, and a first resilient member located between the mounting body and the locking part, wherein the locking part is configured to slide within the mounting body...wherein the locking part is configured to move along a horizontal locking path relative to the mounting body.” (Exhibit 2012, ¶¶163-165.)

As discussed in Section VII.A.1, Baruch does not teach or suggest a first connection part having a mounting body, a locking part, and a first resilient member as recited in substitute claims 17 or 27.

While substitute claim 31 differs from substitute claim 17 in that substitute claim 31 recites that the “locking part is configured to slide within the mounting body,” this difference in terminology does not affect the patentability of claim 31 over Li. (*Id.*, ¶164.) The latch mechanism 310 pivots relative to the carveout 352, rather than sliding within the carveout 352. (*Id.*, ¶¶102-103.)

Substitute claim 31 also differs from substitute claim 17 in that substitute

claim 31 recites that “the locking part [is] configured to move along a horizontal locking path relative to the mounting body,” but this difference in terminology also does not affect the patentability of claim 31 over Baruch. (*Id.*, ¶164.) The pivoting latch mechanism 310 does not move along a horizontal locking path relative to the carveout 352. (*Id.*, ¶100.)

For at least these reasons, substitute claim 31 is not anticipated by or obvious over Baruch.

F. Substitute Dependent Claim 32 Is Patentable Over The Cited Art.

Substitute dependent claim 32 depends upon substitute claim 31 and therefore overcomes the cited prior art for the same reasons discussed above. Moreover, substitute claim 32 is independently patentable over Li and Baruch. As set forth in the Response, none of U.S. Publication No. 2020/0329837 to Baruchia (“Baruchia”), U.S. Publication No. 2023/0340804 to Hammond et al. (“Hammond”), and/or U.S. Publication No. 2021/0221561 to Davidian et al. (“Davidian”) supplement the deficiencies of Li or Baruch.

VIII. CONCLUSION

For the foregoing reasons, Meridian respectfully requests that, should any of the Challenged Claims be found unpatentable, the Board grant this contingent motion such that the '946 Patent is amended to include the corresponding Substitute Claims identified in the Claim Listing attached herewith as Appendix A.

Respectfully Submitted,

EVERSHEDS SUTHERLAND (US) LLP

Dated: May 20, 2026

By: /Anna C. Halsey/

Anna C. Halsey (Reg. No. 73,960)

Ann G. Fort (admitted *pro hac vice*)

Lindsay M. Kriz (Reg. No. 79,726)

Jeremy D. Spier (Reg. No. 64,544)

EVERSHEDS SUTHERLAND (US) LLP

600 Peachtree St. NE, Suite 5200

Atlanta, GA 30308

(404) 853-8000

(404) 853-8806

Email: AnnaHalsey@eversheds-sutherland.us

Email: AnnFort@eversheds-sutherland.us

Email: LindsayKriz@eversheds-sutherland.us

Email: JeremySpier@eversheds-sutherland.us

Attorneys for Patent Owner

APPENDIX A

CLAIM LISTING

17. (substitute for claim 1, if found unpatentable) A storage box comprising:
- a first connection part disposed on one area of said storage box connectable to a second connection part of another storage box;
 - wherein, said first connection part comprises a mounting body, a locking part comprising a locking buckle~~movable with respect to said mounting body~~, and a first resilient member located between said mounting body and said locking-buckle part, wherein the locking part is at least partially received within and movable with respect to the mounting body, and wherein said first resilient member keeping said locking buckle automatically in a locked state;
 - wherein, said second connection part of the other storage box comprises a mating part interlockable with the locking buckle,
 - wherein the locking-buckle part is configured to slide inward with respect to the mounting-part body so that the locking buckle is automatically lockable with the mating part of the other storage box by action of said first resilient member when the locking buckle is aligned with the mating part of the other storage box;
 - ~~a locking part cooperating with the locking buckle~~, wherein manual movement of the locking part causes the locking buckle to move to an unlocked state; and
 - a stop part, wherein when the stop part projects outward with respect to a locking path of the locking part, said locking part is not automatically lockable and said first connection part is in a state of remaining unlocked

from said second connection part, wherein the stop part is retractable, said stop part being extended when said first connection part is in a holding unlocked state with said second connection part of the other storage box, and said stop part being compressed when said first connection part is in a locked state with said second connection part.

18. (substitute for claim 2, if found unpatentable) The storage box of claim ~~[[1]]~~17, wherein said stop part is provided on said locking part and is movable with said locking part along the locking path of the locking part.
19. (substitute for claim 3, if found unpatentable) The storage box of claim ~~[[2]]~~18, wherein said locking part comprises a holding slot opened on the locking part, and further comprising a second resilient member combined between the holding slot and the stop part to extend the stop part outward in an extended state and said stop part is accommodated in said holding slot in a compressed state.
20. (substitute for claim 4, if found unpatentable) The storage box of claim ~~[[3]]~~19, wherein when the stop part is retractably provided in said holding slot, said second resilient member is compressed;
when said stop part is biased outward and held against a mating portion, said locking buckle is not automatically lockable to the mating part of the other storage box.
21. (substitute for claim 5, if found unpatentable) The storage box of claim ~~[[4]]~~20, wherein said second resilient member is a torsion spring with one

end against said stop part and the other end against a bottom of said holding slot; when said torsion spring is extended, said stop part extends out of said holding slot and when said torsion spring is compressed, said stop part is retracted into said holding slot.

22. (substitute for claim 6, if found unpatentable) The storage box of claim ~~[[5]]~~21, and further comprising a shaft connected to said locking part about which said stop part rotates, said shaft being fixed to said locking part; wherein the torsion spring being positioned on said shaft.
23. (substitute for claim 7, if found unpatentable) The storage box of claim ~~[[1]]~~17, wherein said locking part is a sliding latch for horizontal movement.
24. (substitute for claim 8, if found unpatentable) The storage box of claim ~~[[1]]~~17, wherein said first connection part is provided on a lid of said storage box.
25. (substitute for claim 9, if found unpatentable) The storage box of claim ~~[[1]]~~17, wherein two adjacent storage boxes are interlockable with each other by means of the first connection part and the second connection part of the other storage box.
26. (substitute for claim 10, if found unpatentable) The storage box of claim ~~[[1]]~~17, and further comprising a second resilient member, and wherein the locking part comprises of a slot, and wherein the stop part is biased outward from the slot by the second resilient member.

27. (substitute for claim 11, if found unpatentable) A storage box comprising:
- a first connection part disposed on one area of said storage box connectable to a second connection part of another storage box;
 - wherein, said first connection part comprises a mounting body, a locking part comprising a locking buckle~~movable with respect to said mounting body~~, and a first resilient member located between said mounting body and said locking-buckle part, wherein the mounting body is configured to receive at least a portion of the locking part therein and wherein the locking part is movable with respect to the mounting body, and wherein said first resilient member keeping said locking buckle automatically in a locked state;
 - wherein, said second connection part of the other storage box comprises a mating part interlockable with the locking buckle,
 - wherein the locking-buckle part is configured to slide inward with respect to the mounting-part body so that the locking buckle is automatically lockable with the mating part of the other storage box by action of said first resilient member when the locking buckle is aligned with the mating part of the other storage box;
 - ~~a locking part cooperating with the locking buckle~~, wherein manual movement of the locking part causes the locking buckle to move to an unlocked state; and
 - a stop part, wherein when the stop part projects outward with respect to a locking path of the locking part, said locking part is not automatically lockable and said first connection part is in a state of remaining unlocked from said second connection part;

a second resilient member, and wherein the locking part comprises of a slot, and wherein the stop part is biased outward from the slot by the second resilient member, wherein the stop part moves perpendicular with respect to a sliding path of the locking part.

28. (substitute for claim 12, if found unpatentable) The storage box of claim [[11]]27, wherein the stop part moves outward relative to the locking part.
29. (substitute for claim 13, if found unpatentable) The storage box of claim [[11]]27, wherein the second resilient member is a torsion spring and the stop part rotates relative to the locking part.
30. (substitute for claim 14, if found unpatentable) The storage box of claim [[1]]27, further comprising a bottom comprising a projection, four sidewalls projecting from the bottom, a hinged lid to access an interior, and a positioning slot on the hinged lid, wherein two adjacent said storage boxes are located with respect to each other by the projection of the bottom and the positioning slot on the lid, wherein the lid comprises four projections and the bottom comprises four positioning recesses, wherein two adjacent said storage boxes are located with respect to each other by the projection and the four positioning recesses on the bottom and the positioning slot and the four projections on the lid; wherein the four projections on the lid project upward from a top face of the lid, and the four positioning recesses of the bottom are located in a bottom face.
31. (substitute for claim 15, if found unpatentable) A storage box comprising:

a first connection part disposed on one area of said storage box, wherein the first connection part comprises a mounting body, a locking part comprising a locking buckle, movable with respect to the mounting body, and a first resilient member located between the mounting body and the ~~locking-buckle part~~ locking part to bias the locking buckle automatically outward in a locked state, wherein the locking part is configured to slide within the mounting body;

[[a]]wherein the locking part configured to move along a horizontal locking path relative to the mounting body and to cooperate with the locking buckle, wherein manual movement of the locking part along the horizontal locking path causes the locking buckle to move between an unlocked state retracted with respect to the mounting body and a locked state extended with respect to the mounting body;

a stop part combined to the locking part comprising an unlocked state corresponding to the unlocked state of the locking buckle with the stop part extended from the locking part and the locking buckle held retracted with respect to the mounting body, and a locked state corresponding to the locked state of the locking buckle with the stop part retracted with respect to the locking part and the locking buckle held extended with respect to the mounting body; and

a second connection part disposed on another area of said storage box, wherein the second connection part comprises a mating part that corresponds to the locking buckle, wherein said locking part further comprises a holding slot opened on the locking part, and further comprising a second resilient member combined between the holding slot and the stop part, wherein the stop part is extended from the slot in the locking part when the stop part is in

the unlocked state, and wherein the stop part is retracted in the slot in the locking part when the stop part is in the locked state.

32. (substitute for claim 16, if found unpatentable) The storage box of claim [[15]]31, further comprising a bottom comprising a projection, four sidewalls projecting from the bottom, a hinged lid to access an interior, and a positioning slot on the hinged lid, wherein two adjacent said storage boxes are located with respect to each other by the projection of the bottom and the positioning slot on the lid, wherein the lid comprises four projections and the bottom comprises four positioning recesses, wherein two adjacent said storage boxes are located with respect to each other by the projection and the four positioning recesses on the bottom and the positioning slot and the four projections on the lid; wherein the four projections on the lid project upward from a top face of the lid, and the four positioning recesses of the bottom are located in a bottom face.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing *Patent Owner's Contingent Motion to Amend Under 37 C.F.R. § 42.121* was served via electronic mail, per agreement of the parties, in its entirety, on Petitioner's attorneys of record in IPR2025-01461 on the date indicated below.

Lead Counsel: Richard M. Bemben (Reg. No. 68,658)
Sterne, Kessler, Goldstein & Fox PLLC
1101 K Street, NW, 10th Floor
Washington, DC 20005
rbemben-PTAB@sternekessler.com
PTAB@sternekessler.com

Backup Counsel: Timothy L. Tang (Reg. No. 75,187)
Melissa A. Haapala (Reg. No. 47,622)
William H. Milliken (admitted *pro hac vice*)
Sterne, Kessler, Goldstein & Fox PLLC
1101 K Street, NW, 10th Floor
Washington, DC 20005
ttang-PTAB@sternekessler.com
mhaapala-PTAB@sternekessler.com
wmilliken-PTAB@sternekessler.com

Dated: May 20, 2026

By: /Anna C. Halsey/
Anna C. Halsey