

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEALS BOARD

EP FAMILY CORP.

Petitioner,

v.

OFFICE KICK, INC.

Patent Owner.

Inter Partes Review No. IPR2025-00497

Petition Filing Date: January 17, 2025

PETITION FOR *INTER PARTES* REVIEW

OF U.S. PATENT NUMBER 11,910,926

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LISTING OF PETITIONER'S EXHIBITS

Exhibit No.	Description
1001	US Patent No. 11,910,926 (“‘926 Patent”)
1002	Declaration of Nathan J. Macdonald
1003	Attachment 1 to Macdonald Declaration – Nathan Macdonald’s Curriculum Vitae
1004	Attachment 2 to Macdonald Declaration – Nathan Macdonald’s Previous Testimony
1005	Attachment 3 to Macdonald Declaration – Nathan Macdonald’s Reviewed Information
1006	Attachment 4 to Macdonald Declaration – Fundamental Concepts Regarding Invalidity
1007	Attachment 5 to Macdonald Declaration – Lindahl in View of Yamamoto, and in Further View of HJ Zottel with the Knowledge of a POSITA
1008	Attachment 6 to Macdonald Declaration – Clarke in View of Lindahl and in Further View of HJ Zottel with the Knowledge of a POSITA
1009	Attachment 7 to Macdonald Declaration – Huang (2014 Published Application) in View of Clarke and in Further View of HJ Zottel with the Knowledge of a POSITA
1010	Attachment 8 to Macdonald Declaration – Yamamoto in View of Zhang and in Further View of HJ Zottel with the Knowledge of a POSITA
1011	WO Patent No. 9117906 (“Lindahl”)
1012	US Patent No. 4,574,785 (“Yamamoto”)
1013	US Patent No. 2,225,243 (“HJ Zottel”)
1014	US Patent No. 3,282,566 (“Clarke”)
1015	US Patent No. 2014/0041554 (“Huang”)
1016	CN Patent No. 203934825 (“Zhang”)

Exhibit No.	Description
1017	US Patent No. 5,294,087 (“Drabczyk”)

I. INTRODUCTION

EP Family Corp. (“Petitioner”) petitions for *Inter Partes* Review (“IPR”) of Claims 1-10, 12, 14-16, and 18 (“Asserted Claims”) of U.S. Patent No. 11,910,926 (’926 Patent) (Ex. 1001), under 35 U.S.C. §§311-319 and 37 C.F.R. §42.

The Asserted Claims never should have been issued because prior art that was not disclosed to and considered by the Patent Examiner (“Examiner”) render them obvious. The elements of the Asserted Claims were present in the prior art, and a person of ordinary skill in the art (“POSITA”) would have been prompted to combine them in the way the Asserted Claims do.

Petitioner has retained an independent expert, Nathan J. Macdonald, who is a registered professional engineer as well as a certified safety professional. Mr. Nathan Macdonald has prepared a declaration in support of this Petition and filed concurrently herewith. The Macdonald Declaration (“Macdonald Dec.”) establishes that Mr. Macdonald is a POSITA and performs a comprehensive invalidity analysis on the Asserted Claims to demonstrate the obviousness of the ’926 Patent in view of the prior art references discussed herein.

The ’926 Patent is directed to “[a] desktop workplace that adjusts vertically and includes a work surface platform, a base configured to sit on an existing platform, such as a desk, a height adjustable mechanism including at least one set of arms that connect at a pivot point(s) creating a scissoring motion to raise and lower the said work surface platform to various heights. (Ex. 1001, ’926 Patent *Abstract*). The ’926 Patent is directed to a “locking and unlocking mechanism may connect to the height adjustable mechanism.” *Id.* In some cases, the apparatus

directed by the '926 Patent “includes an adjustable mechanism to support items such as a keyboard” as well as “elements to raise items such as a monitor to an additional height.” *Id.*

However, as this Petition will demonstrate, the '926 Patent should never have been issued because it attempts to claim mundane components that are (and have) been easily incorporated into numerous mechanical designs as a matter of ordinary practice in the field of engineering. As grounds for cancellation of the Asserted Claims, this Petition relies on six prior art references, four of which were not before the Office during prosecution. As described in the Petition, there is a reasonable likelihood that Petitioner will prevail with respect to at least one of the challenged claims. Accordingly, Petitioner requests institution of the IPR.

The required fee is being submitted herewith.

II. GROUNDS FOR STANDING

In accordance with 37 C.F.R. §42.104(a), Petitioner certifies that the patent for which review is sought is available for IPR and that Petitioner is not barred or estopped from requesting an IPR challenging the patent claims on the grounds identified in the Petition.

III. NOTICE OF REAL PARTY IN INTEREST

Petitioner is a California corporation specializing in e-commerce business for furniture and other home furnishing services. Petitioner has its main office address at 368 Cheryl Lane, Walnut, CA 91789. There are no other real parties in interest.

IV. NOTICE OF RELATED MATTERS

This petition presents the same asserted claims as those at issue in *EP Family Corp. v. Office Kick, Inc.*, Case No. 2:24-cv-0067 AB (PVCx), in the Central District of California.

V. NOTICE OF LEAD AND BACKUP COUNSEL

Lead Counsel for Petitioner is Kevin Terrazas (Reg. No. 60417) of Terrazas, PLLC, 1001 S Capital of Texas Hwy, Building L, Suite 250, Austin TX 78746. Kevin Terrazas' phone number is 512-680-3257 and his email is kterrazas@terrazaspllc.com.

Backup Counsel for Petitioner is Joshua G. Simon (*Pro Hac Vice* to be filed), of Call & Jensen, 610 Newport Center Drive, Suite 700, Newport Beach, CA 92660. Mr. Simon's phone number is (949) 717-3000 and his email is jsimon@calljensen.com.

VI. NOTICE OF SERVICE INFORMATION

Documents may be hand delivered to the address of Lead and Backup Counsel above. Petitioner also consents to electronic service by email.

VII. STATEMENT OF RELIEF REQUESTED

Petitioner requests cancellation of the Asserted Claims of U.S. Patent No. 11,910,926 ('926 Patent) (Ex. 1001) based on the following grounds, each of which is supported in detail below:

Ground 1: The Asserted Claims are unpatentable under §103 as obvious over Lindahl in view of Yamamoto and in further view of HJ Zottel.

Ground 2: The Asserted Claims are unpatentable under §103 as obvious over Clarke in view of Lindahl and in further view of HJ Zottel.

Ground 3: The Asserted Claims are unpatentable under §103 as obvious over Huang in view of Clarke and in further view of HJ Zottel.

Ground 4: The Asserted Claims are unpatentable under §103 as obvious over Yamamoto in view of Zhang and in further view of HJ Zottel.

VIII. THE '926 PATENT

A. Discussion of the Disclosure of the '926 Patent

The '926 Patent was filed on November 10, 2022, by Nathan Mark Poniatowski (“Mr. Poniatowski”) (who is the named inventor on the '926 Patent). The alleged invention disclosed in the '926 Patent includes several mundane embodiments. One such embodiment uses a locking gas spring to adjustably set the height of the common scissor lift mechanism that largely comprises the alleged invention. (Ex. 1001, '926 Patent). Gas springs are commonplace components which are easily incorporated into various mechanical designs as a matter of ordinary engineering practice. Gas springs of ordinary and customary design are produced in many different sizes and with different options and functionality. Petitioner assumes that the critical date and effective filing date are both November 10, 2022, for all claims of the '926 Patent.

A locking gas spring is an inexpensive and commonplace component that does not require any special design or undue experimentation to be incorporated. *See* Ex. 1002, Macdonald Dec., ¶ 11. Indeed, it is a matter of routine design practice and implementation accomplished by specifying a component that has

been designed, tested, and manufactured by a third party. *Id.* Regardless, the Examiner agreed with Mr. Poniatowski's arguments and issued the patent.

B. Person of Ordinary Skill in the Art (“POSITA”)

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *Vizio, Inc. v. Broadcom Corp.*, 2018 WL 4278993, at *3 (P.T.A.B. Sept. 7, 2018); *see also In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (internal quotation or citation omitted); *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983).

The types of problems encountered in the art of vertically adjustable work surfaces (such as those encountered by the '926 Patent) include but are not limited to choice of materials, management of load capacity, mechanism topology selection, actuator selection, management of mechanical advantage, management of the input of force and/or power, and the overall stability of the mechanism. *See* Ex. 1002, Macdonald Dec., ¶ 14. Additionally, innovations in the vertically adjustable work surface industry have typically been slow with the overall form and function of vertically adjustable work surfaces remaining largely unchanged. *Id.* at ¶ 16. For example, the prior art that will be discussed in this Petition is replete with scissor mechanisms used to vertically position work surfaces, dating back to at least as early as 1878 in a patent (US 200,057) issued to W. W. Hart. *Id.* Indeed, many vertically adjustable work surfaces use a similar scissor mechanism

to this day. *Id.* Active workers in the field would typically be individuals with a bachelor's degree in Mechanical Engineering who may have only a few years of professional experience. *Id.*

Based on the above, a POSITA in the field of vertically adjustable work surfaces would have at least a bachelor's degree in Mechanical Engineering (or another technical field) and at least 2 years of experience in consumer product design. *Id.* at ¶ 17. More industry experience could reduce the amount of educational experience required. *Id.* As previously mentioned, Mr. Nathan Macdonald is a POSITA since, in addition to earning a Bachelor of Science in Mechanical Engineering, he is a certified commercial building inspector and a certified trainer for operators of forklifts, telehandlers, and mobile elevating work platforms. *Id.*

C. Claims Being Challenged and Their Constructions

1. Description of Claims

The Asserted Claims of the '926 Patent include two independent claims (Claims 1 and 18). (Ex. 1001, '926 Patent). Claims 2, 4-10, 12, 14, and 15 are dependent on Claim 1. Claim 3 is dependent on Claim 2. Claim 16 is dependent on Claim 15. *Id.* Claims 1-10, 12, 14-16, and 18 are all being challenged.

2. Claim Construction

The Board is required, by 37 C.F.R. §42.100, to interpret claims using the same claim construction standard that would be used to construe claims in a civil action under 35 U.S.C. §282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by a POSITA and

the prosecution history pertaining to the patent. *Samsung Elecs. Co., Ltd. v. Dodots Licensing Sols. LLC*, 2023 WL 6633786, at *11 (P.T.A.B. Oct. 11, 2023). Only those terms that are in controversy need be construed, and only to the extent necessary to resolve the controversy. *Dodots Licensing Sols. LLC*, 2023 WL 6633786, at *11; *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

a) Claim 1 and its Dependent Claims

Claim 1 consists of the following elements:

1P. A desktop workspace that adjusts vertically, comprising:

1a. a work surface platform;

1b. a slidable tray that can be selectively positioned between a stored position under the work surface platform and an extended position that is outward and lowered with respect to the work surface platform;

1c. a base configured to sit on an existing platform; and

1d. a height adjustment mechanism connecting the work surface platform and the base, the height adjustment mechanism including:

1d1. a set of pivot arms that connect at a scissoring pivot point creating a scissoring motion when raising and lowering the work surface platform to various heights;

1d2. a base pivot point fixed relative to the base and connecting the base and the set of pivot arms;

1d3. a platform pivot point fixed relative to the work surface platform and connecting the work surface platform and the set of pivot arms;

1d4. a sliding mechanism on an end of an arm of the set of pivot arms between the end of the arm and either the work surface platform or the base; and

1d5. a gas spring that assists in elevation of the work surface platform by applying a force to rotate one of the sets of pivot arms as part of the scissoring motion;

1d6. wherein one end of the gas spring is fixed to the work surface platform;

1d7. wherein the gas spring acts as a locking device that holds the work surface platform at various vertical heights above the base; and

1d8. wherein the gas spring is under the work surface platform and above the existing platform. (Ex. 1001, Claim 1)

Claim 2 adds the following elements to the desktop workplace of **Claim 1**:

Claim 2

2a. Wherein the slidable tray is mounted to an underside of the work surface platform with a slider such that the slidable tray is selectively positionable between the stored position under the work surface platform and the extended position that is outward and lowered with respect to the work surface platform;

2b. wherein the slider includes a channel offset from the underside of the work surface platform, forming a gap between the slidable tray and the underside of the work surface platform.

Claim 3 add the following elements to the desktop workplace of **Claim 2**:

Claim 3

3a. Further comprising a bracket fixed to the underside of the work surface platform, wherein the channel is mounted to the bracket such that the channel is offset from the underside of the work surface platform.

Claims 4-10, 12, 14, and 15 add the following elements to the desktop workplace of **Claim 1**:

Claim 4

4a. Wherein the set of pivot arms is a first set of pivot arms, the desktop workspace further comprising:

4a1. a second set of pivot arms; and

4a2. an element that connects the first set of pivot arms to the second set of pivot arms.

Claim 5

5a. Wherein the work surface platform forms an upper work surface, and

5b. wherein the gas spring is completely covered by a profile of the work surface platform when viewed from above the upper work surface relative to the base, the profile of the work surface platform being defined by an outer perimeter of the upper work surface.

Claim 6

6a. Wherein the gas spring is a first spring;

6b. the desktop workspace comprising a pair of springs attached to the height adjustment mechanism to assist in the elevation of the work surface platform; and

6c. the pair of springs including the first spring and a second spring.

Claim 7

7a. Wherein the sliding mechanism is a first sliding mechanism; and

7d. the other of the first sliding mechanism and the second sliding mechanism is attached to or slides along the base.

Claim 8

8a. Wherein the scissoring motion when raising and lowering the work surface platform to various heights of the height adjustment mechanism moves the work surface platform in a straight vertical direction relative to the base.

Claim 9

9a. Wherein the slidable tray protrudes out, down, and parallel to the work surface platform in the extended position.

Claim 10

10a. Wherein the gas spring is attached directly to the one of the sets of pivot arms.

Claim 12

12a. Further comprising a height adjustment locking mechanism that holds the work surface platform at various vertical heights above the base.

Claim 14

14a. Further comprising two sliders that connect the slidable tray to the work surface platform; and

14b. wherein the two sliders operate in parallel to facilitate selectively positioning the slidable tray between the stored position under the work surface platform and the extended position that is outward and lowered with respect to the work surface platform.

Claim 15

15a. Wherein the one end of the gas spring is fixed relative to an underside of the work surface platform such that the one end of the gas spring acts on the underside of the work surface platform.

Claim 16 add the following elements to the desktop workplace of **Claim 15:**

Claim 16

16a. Wherein the one end of the gas spring is fixed to the work surface platform via a bracket mounted to the underside of the work surface platform.

b) Independent Claim 18

Claim 18 consists of the following elements:

18P. A desktop workspace that adjusts vertically, comprising:

18a. a work surface platform;

18b. a slidable tray selectively positionable between a stored position under the work surface platform and an extended position that is outward and lowered with respect to the work surface platform;

18c. a base configured to sit on an existing platform; and

18d. a height adjustment mechanism connecting the work surface platform and the base, the height adjustment mechanism including:

18d1. a set of pivot arms that connect at a scissoring pivot point creating a scissoring motion when raising and lowering the work surface platform to various heights;

18d2. a base pivot point fixed relative to the base and connecting the base and the set of pivot arms;

18d3. a platform pivot point fixed relative to the work surface platform and connecting the work surface platform and the set of pivot arms;

18d4. a sliding mechanism on an end of an arm of the set of pivot arms between the end of the arm and either the work surface platform or the base;

18d5. a gas spring that assists in elevation of the work surface platform by applying a force to rotate one of the set of pivot arms as part of the scissoring motion; and

18d6. wherein the gas spring, the set of pivot arms, the base pivot point, and the platform pivot point align side-by-side when the desktop workspace is in a fully lowered position such that the desktop workspace adjusts vertically.

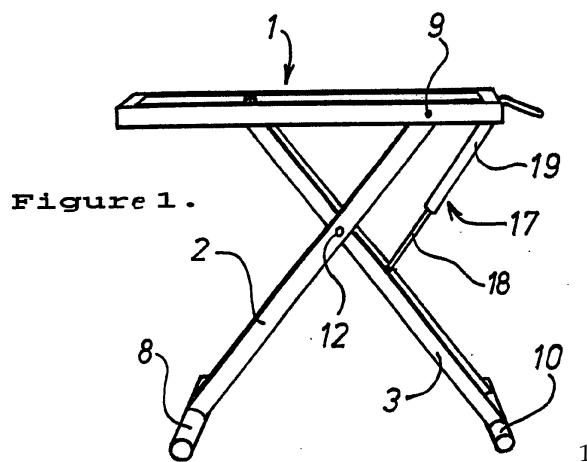
D. Overview of Prior Art References

The following prior art references will demonstrate that the '926 Patent is not inventive and should not have been granted. Further, the following prior art references (and their combinations) also demonstrate that the vertically adjusting

desktop workspace is merely the amalgamation of ordinary and widely recognized design elements and methods. The vast amount of analogous prior art references in the field of desktop workplace designs proves the lack of inventiveness of the '926 Patent.

Accordingly, a POSITA would find the following prior art references are particularly relevant in rendering the '926 Patent obvious to produce. *See* Ex. 1002, Macdonald Dec., ¶ 20. Notably, four of these prior art references were not disclosed to the examiner during the prosecution of the '926 Patent.

1. Overview of Patent WO 9117906 to Lindahl

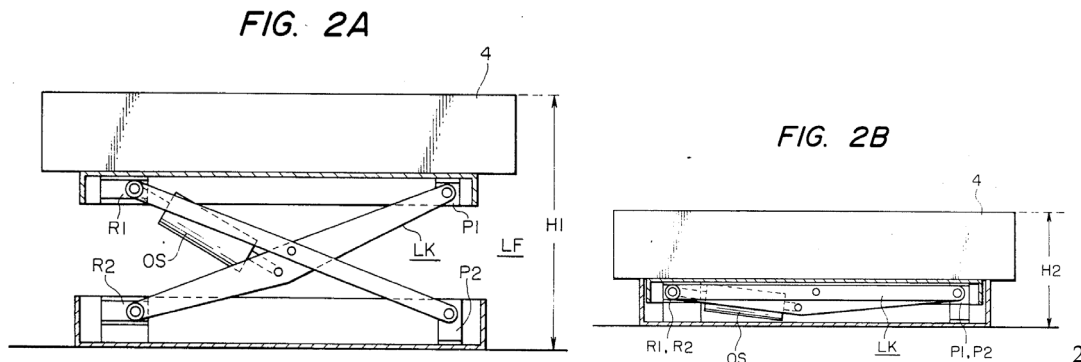


Patent WO 9117906 to Lindahl ("Lindahl") was issued November 28, 1991. (*See* Ex. 1011, Lindahl). Lindahl was not before the Examiner. Lindahl discloses a continuously adjustable scissor lift platform using a locking gas spring (a commonplace component that interacts with a scissor leg mechanism). *Id.* The locking gas spring allows the platform to be set at any height desired by the user of the apparatus. *Id.* Lindahl also discloses the use of a simple handle to lock or

¹ *See* Ex. 1011, Lindahl

unlock the gas spring. *Id.* Lindahl demonstrates how a POSITA would easily understand the interchangeability between a hydraulic cylinder and a locking gas spring. *See* Ex. 1002, Macdonald Dec., ¶ 21.

2. Overview of Patent US 4,574,785 to Yamamoto

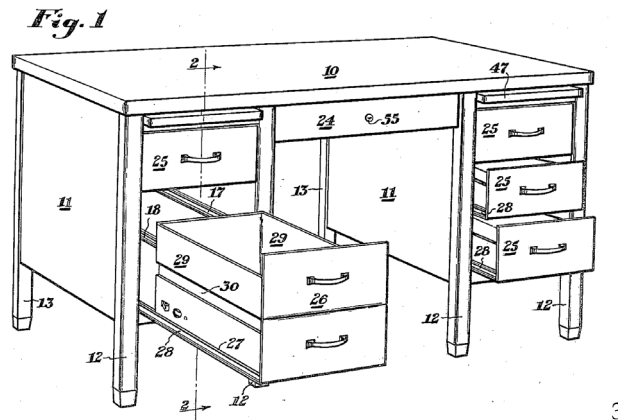


Patent US 4,574,785 to Yamamoto (“Yamamoto”) was issued on March 11, 1986. (*See* Ex. 1012, Yamamoto). Yamamoto was *not* before the Examiner. Yamamoto discloses a scissor lift platform where the scissor mechanism is operable from a completely collapsed position to a fully deployed one. *Id.* Even though the Yamamoto apparatus is applied to a medical bed, a POSITA would easily understand that such a scissor lift surface has broader applications and can extend to devices such as desktop workplaces. *See* Ex. 1002, Macdonald Dec., ¶ 21. The crux of Yamamoto lies in its controls system and on the fluidized bed itself. *Id.* The scissor lift mechanism described by Yamamoto is so mundane that it is not a major point of focus in Yamamoto. *Id.* Additionally, the use of gas springs to assist linkages such as scissor lifts was well known as well. *Id.*

Based on the above, a POSITA would easily recognize that the interchangeability of the hydraulic cylinder and locking gas spring would provide

advantages in simplifying the lift mechanism to no longer need an external hydraulics system. *Id.*

3. Overview of Patent US 2,225,243 to HJ Zottel



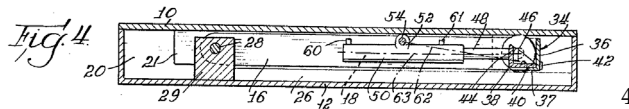
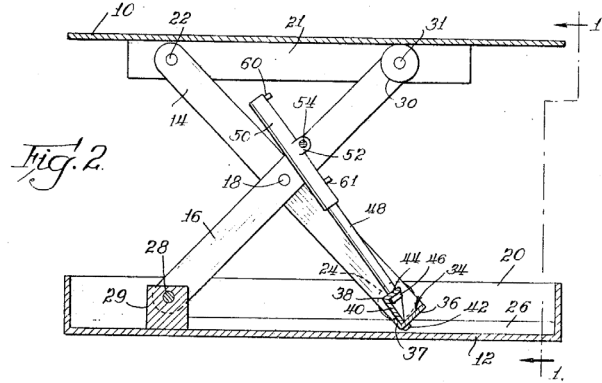
Patent US 2,225,243 to Zottel (“HJ Zottel”) was issued on December 17, 1940. (See Ex. 1013, HJ Zottel). HJ Zottel was *not* before the Examiner. HJ Zottel discloses an office desk of ordinary design consisting of a top surface and a series of drawers that are directly underneath. *Id.* Notably, HJ Zottel discloses a center drawer (item 24 in the figure to the left) directly under the desk surface centrally located.

4. Overview of Patent US 3,282,566 to Clarke

Continued from the previous page

² See Ex. 1012, Yamamoto

³ See Ex. 1013, HJ Zottel

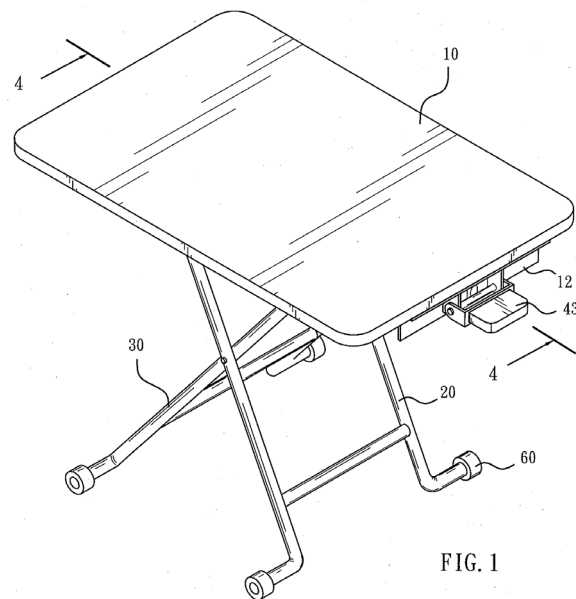


Patent US 3,282,566 to Clarke (“Clarke”) was issued on May 18, 1964. Clarke was before the Examiner and cited in a prior rejection. (See Ex. 1014, Clarke). Clarke discloses a scissor lift mechanism for vertically lifting a table from a stowed position to an open position. *Id.* Clarke addresses the well-known problem that can occur in actuated scissor lift mechanisms when the mechanism lifts up from a completely flat position. In typical scissor lift mechanisms that collapse to become perfectly flat, it may become impossible to lift the upper platform without the assistance of some other mechanism. Many scissor lift mechanisms solve this problem by never allowing a linkage to go completely flat. However, this solution detracts from one of the main advantages of a scissor mechanism: Compactness. Clarke proposes an alternate solution through an eccentric trunnion mounted cylinder which allows the actuator to develop a vertical lift force even when the linkage is fully collapsed. A POSITA would easily recognize that the hydraulic cylinder could be swapped for a locking gas spring to

⁴ See Ex. 1014, Clarke

achieve this solution. *See* Ex. 1002, Macdonald Dec., ¶ 21. Further, a POSITA would recognize that making this adjustment would provide significant advantages in simplifying the lift mechanism to no longer need the external hydraulics system. *Id.*

5. Overview of Patent US 2014/0041554 to Huang



Patent Application US 2014/0041554 to Huang (“Huang”) was published February 13, 2014. (*See* Ex. 1015, Huang). Huang was *not* before the Examiner. Huang discloses a height-adjustable scissor lift table of ordinary design. *Id.* Huang also discloses the use of a locking gas spring (which Huang refers to as an “air pressure bar”) that can be selectively locked and unlocked through the use of a handle. *Id.* Notably, Huang configures the structural elements of the sliding mechanism to reinforce the structural strength of the table. Accordingly, a POSITA would recognize that an air pressure bar effectively functions as a gas spring because the air pressure bar is merely a simple piston-cylinder device with no inlet

and outlet ports (features that are typical of a gas spring). *See* Ex. 1002, Macdonald Dec., ¶ 21.

6. Overview of Patent CN203934825 to Zhang

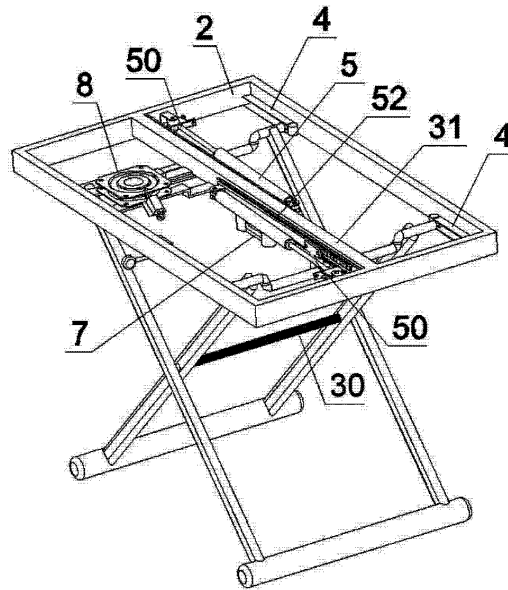


图 4

6

Patent CN203934825 to Zhang (“Zhang”) was issued on May 26, 2014. (*See* Ex. 1016, Zhang). Zhang was before the Examiner but not cited. Zhang discloses an elevated work surface platform that can be continuously adjusted to a variety of heights and locked in place. *Id.* Zhang describes the use of a pair of locking gas springs (which Zhang refers to as “driving air rods”) to facilitate the adjustment and support of an elevated desktop workplace. The locking gas springs described in Zhang are of ordinary design. Additionally, Zhang describes a Bowden cable-based arrangement with a handle that can be used to selectively unlock or lock the gas springs. *Id.* When the gas springs are unlocked, they exert an outward assistive

Continued from the previous page

⁵ See Ex. 1015, Huang

⁶ See Ex. 1016, Zhang

force which aids in lifting the work surface platform. Zhang also describes a turntable which allows the tabletop portions to be swiveled and unfolded. *Id.* Accordingly, Zhang proffers a design which can be stored very compactly when not in use. *See* Ex. 1002, Macdonald Dec., ¶ 21.

IX. STATEMENT OF REASONS FOR RELIEF REQUESTED

In light of the following grounds and cited art, the Asserted Claims are not patentable and should be cancelled under §103 as obvious.

Even if all the elements of a patented invention cannot be found in a single piece of prior art, the patent may still be found to be invalid if the invention is found to be obvious. 35 U.S.C. § 103(a) codifies the requirement that a patented invention cannot be obvious:

A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Obviousness may be shown by considering “whether two or more pieces of prior art could be combined, or a single piece of prior art could be modified, to produce the claimed invention. This analysis typically invokes the familiar teaching-suggestion-motivation (“TSM”) test....” *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1351-52 (Fed. Cir. 2010). “If a person of ordinary skill in the art can implement a predictable variation [on the prior art], and would see the benefit

of doing so, §103 likely bars its patentability.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007).

Although the Supreme Court has rejected a rigid test of obviousness, the Court noted that “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR*, 550 U.S. at 418. The Supreme Court explained that when making a determination of whether the inventor would be motivated to combine elements from prior art references, a court must look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis must be made explicit. *Id.* at 419. “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416.

The Federal Circuit also stated, “we conclude that while ‘common sense’ can be invoked, even potentially to supply a limitation missing from the prior art, it must still be supported by evidence and a reasoned explanation. In cases in which ‘common sense’ is used to supply a missing limitation, as distinct from a motivation to combine, moreover, our search for a reasoned basis for resort to common sense must be searching. And, this is particularly true where the missing

limitation goes to the heart of an invention.” *Arendi v. Apple*, 832 F.3d 1355, 1363 (Fed. Cir. 2016).

While obviousness under § 103 is a question of law, it is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966); *Up v. Techs.*, 2020 WL 582387, at *5 (P.T.A.B. Feb. 4, 2020).

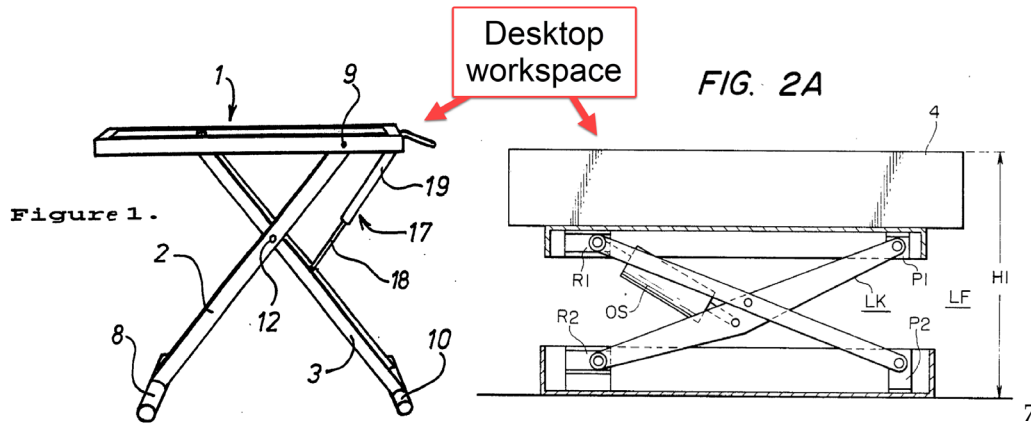
A. Ground 1: The Asserted Claims are Unpatentable Under §103 as Obvious Over Lindahl in View of Yamamoto and in Further View of HJ Zottel

The Asserted Claims are obvious over Lindahl in view of Yamamoto and in further view of HJ Zottel. A POSITA would have been prompted by these three references, none of which were disclosed to the Examiner during the prosecution of the '926 Patent, to combine their elements in the same manner as the Asserted Claims, as demonstrated by Mr. Macdonald’s comprehensive invalidity analysis. *See generally* Ex. 1007.

1. Independent Claim 1 Is Obvious Over Lindahl in View of Yamamoto and in Further View of HJ Zottel.

a) Element 1P: “a desktop workspace that adjusts vertically”

Both Lindahl and Yamamoto disclose a desktop workspace that adjusts vertically. Ex. 1007, pp. 2–4:



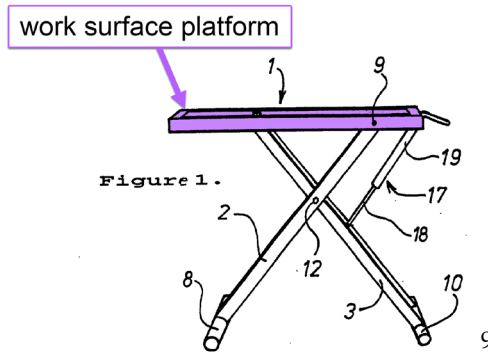
Lindhahl clearly discloses a platform that “can be adjusted vertically to different positions.” *See* Ex. 1011, Lindahl Abstract. Yamamoto also describes a vertically adjustable workspace platform (a patient support platform). *See* Ex. 1012, Yamamoto 1:53-60. The usage of the term “desktop workspace” within the ’926 Patent is consistent with the plain and ordinary meaning of the words from which the term is composed. Ex 1007 at p. 4. For example, the desktop workspace in the ’926 Patent is described as having a top surface at which an operator stands to perform their work.⁸ Similarly, Yamamoto discloses a work surface in the form of a bed on a table at which an operator stands to perform various tasks. (Ex. 1012, Yamamoto). Lindahl also discloses a desk surface which is a dedicated space allocated for one’s work should they so choose. (Ex. 1011, Lindahl).

b) Element 1a: “a work surface platform”

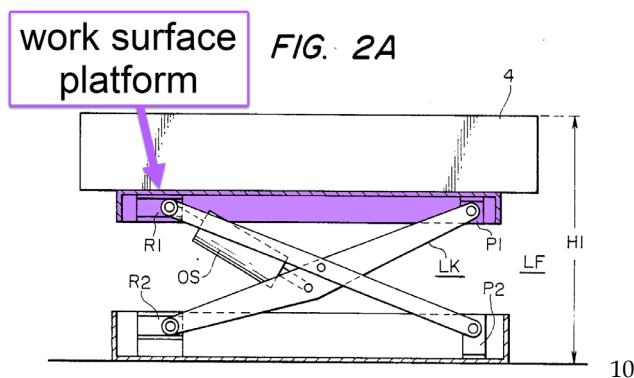
Both Lindahl and Yamamoto disclose a work surface platform. Ex. 1007, pp. 4–6. Lindahl describes a work surface platform that is intended to be used as exactly that: a work surface platform. Ex. 1011, Lindahl 3:1-3:

⁷ See Ex. 1011, Lindahl Figure 1; Exhibit 1012, Yamamoto Figure 2A

⁸ Ex. 1001, ’926 Patent 1:33-66



A POSITA would understand that a dining table is perfectly suitable for use as a work surface, and that it is common for dining tables to be used for other types of tasks that are unrelated to dining. Ex. 1007, p. 5. Conversely, Yamamoto describes a platform for supporting a patient.



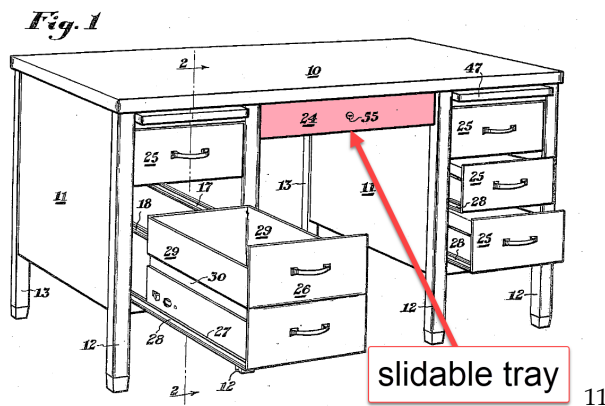
A POSITA would also understand that this is a platform where doctors and nurses perform work on patients, which is clearly an example of a work surface platform. Ex. 1007, p. 6.

⁹ Ex. 1011, Lindahl Figure 1

¹⁰ Ex. 1012, Yamamoto; 1:53-60

- c) **Element 1b: “a slidable tray selectively positionable between a stored position under the work surface platform and an extended position that is outward and lowered with respect to the work surface platform”**

Lindahl in view of Yamamoto, and in further view of HJ Zottel discloses the same slidable tray mechanism. Ex. 1011, Lindahl Figure 1; Ex. 1012, Yamamoto; 1:53-60; Ex. 1013, HJ Zottel 1:4-6; 1:47-50; 2:9-11; Ex. 1007, pp. 6-8.



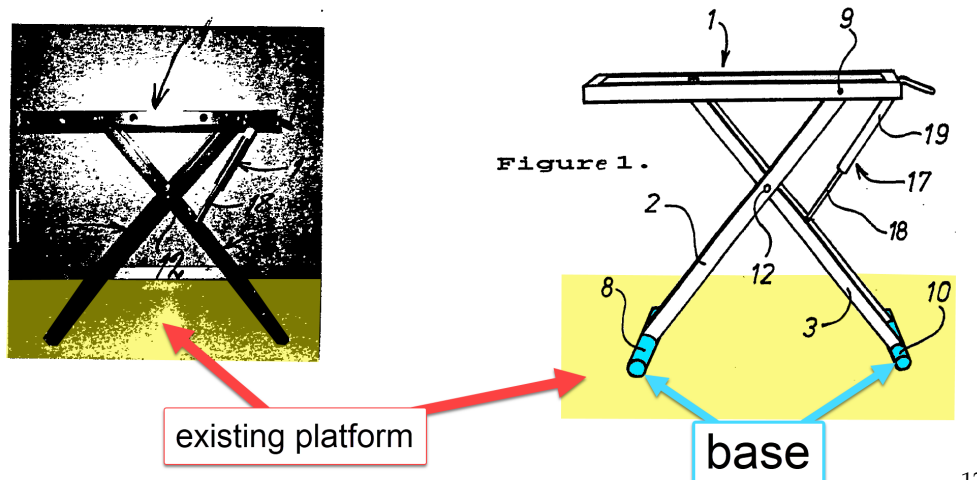
As shown above, HJ Zottel discloses a slidable tray (drawer 24) which is mounted under the work surface platform (desk top 10). A POSITA will understand that drawers are a common feature that can be (and often are) added to any desk design, including that of either Lindahl or Yamamoto. Ex. 1007, p. 7. Therefore, the addition of a mountable drawer under a desk top surface is not remotely inventive because such a design has been widely used and recognized for over a hundred years (i.e. US 1,508,259 to I.A. Stafford filed in 1919, or George Washington’s desk which is over 200 years old and has drawers mounted under the

¹¹ Ex. 1013, HJ Zottel, Figure 1

desk surface). *Id.* Further, a POSITA would also understand that drawers are commonly designed to slide into a stored position or out into an open position. *Id.* As the tray is mounted to the underside of the work surface platform, a POSITA would also understand that the bottom surface of the tray (drawer 24) will be outward and lowered with respect to the work surface platform when it is open. *Id.* at p. 8. Therefore, Lindahl in view of Yamamoto and in further view of HJ Zottel would allow a POSITA to recognize that slideable trays can be combined with desktop workplaces.

d) Element 1c: “a base configured to sit on an existing platform”

Both Lindahl and Yamamoto disclose a base configured to sit on an existing platform. Ex. 1007, pp. 8-9. Lindahl discloses a work surface platform that is configured to be used in caravans and motorhomes.

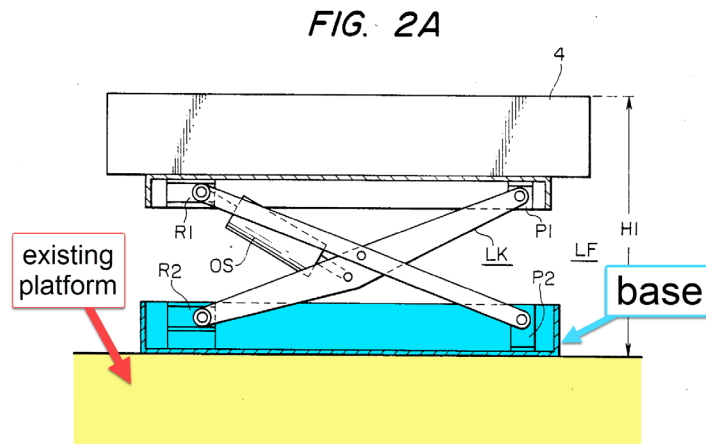


A POSITA will recognize that the floor of a caravan or motorhome is an existing platform on which the desk is taught to be used. Ex. 1007, p. 9. The floor

¹² Ex. 1011, Lindahl cover page and Figure 1; 1:3-6; 13-14; 3:3-10

of a caravan or motorhome is a large flat surface consistently held at a height elevated from the ground. *Id.* Lindahl also has a base in the form of transverse rods that support the stand against the underlying support surface (i.e. existing platform). *Id.*

Yamamoto also discloses a base configured to sit on an existing platform:



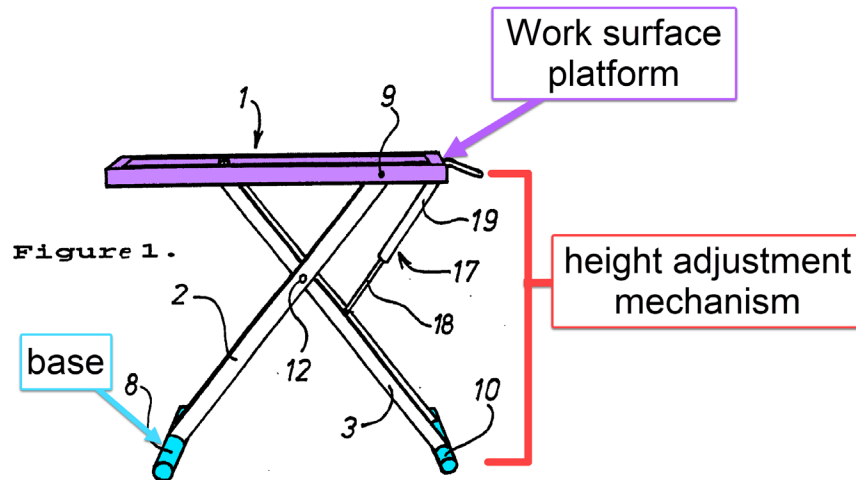
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A POSITA will easily recognize that a floor is an existing platform. Ex. 1007, p. 9.

e) Element 1d: “a height adjustment mechanism connecting the work surface platform and the base, the height adjustment mechanism including”

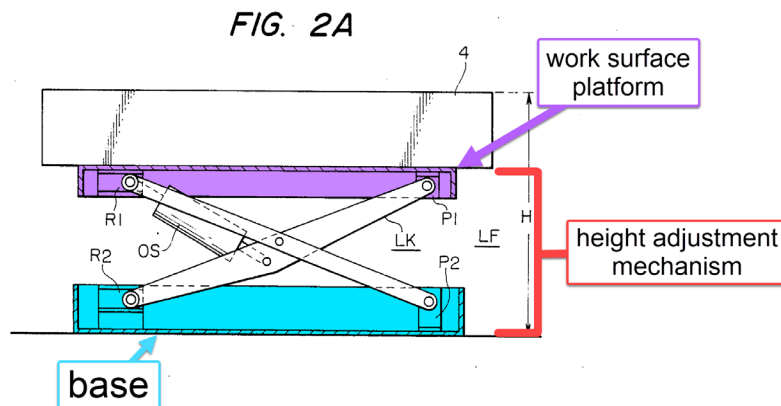
Both Lindahl and Yamamoto disclose a height adjustment mechanism connecting the work surface platform and the base. Ex. 1007, pp. 10–12. Just like with the '926 Patent, the Lindahl mechanism uses a scissor linkage to serve as a height adjustment mechanism which connects the work surface platform to the base:

¹³ Ex. 1012, Yamamoto Figure 2A; 1:53-60



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Yamamoto also discloses a height adjustment mechanism:



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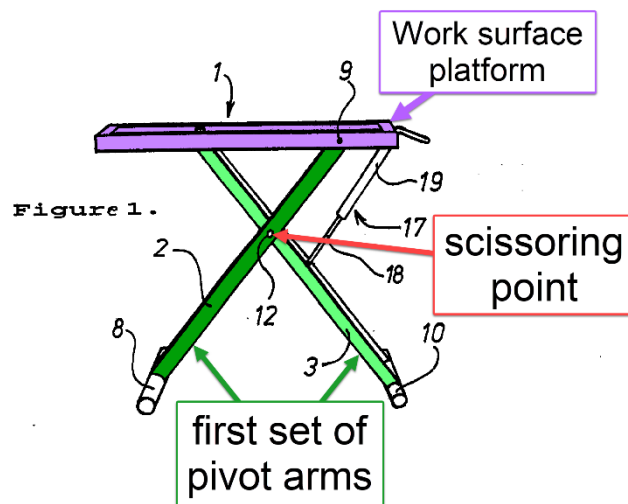
A POSITA will recognize that both Lindahl and Yamamoto use a scissor linkage and that the height adjustment mechanism of Yamamoto and Lindahl mechanism are interchangeable. Ex. 1007, p. 11.

¹⁴ Ex. 1011, Lindahl Figure 1; 1:30-35; 2:12-22

¹⁵ Ex. 1012, Yamamoto; 1:63-2:3

(1) Element 1d1: “a set of pivot arms that connect at a scissoring pivot point creating a scissoring motion when raising and lowering the work surface platform to various heights”

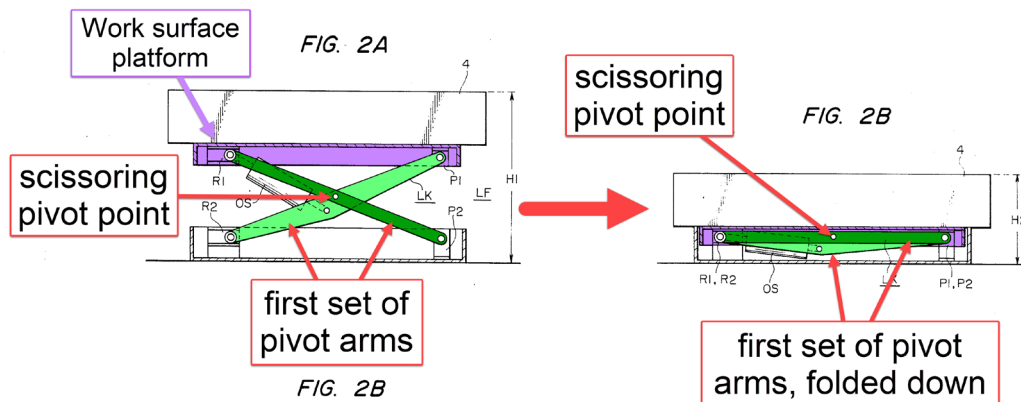
Both Lindahl and Yamamoto have a set of pivot arms that connect at a scissoring pivot point creating a scissoring motion when raising and lowering the work surface platform to various heights. Ex. 1007, pp.12–14. Lindahl discloses a first set of pivot arms connecting at a scissoring point to accomplish a scissoring motion when raising and lowering the work surface to various heights:



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Yamamoto also has a first set of pivot arms connecting at a scissoring point to accomplish the same scissoring motion as Lindahl:

¹⁶ Ex. 1011, Lindahl Figure 1; Abstract, 3:1-3, 11-20



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A POSITA would understand that scissor mechanisms are suitable for vertical lifting applications such as Lindahl and Yamamoto. Ex. 1007, p. 14. Scissor mechanisms are well-known and are very commonly built with two sets of pivot arms. *Id.*

(2) Element 1d2: “a base pivot point fixed relative to the base and connecting the base and the set of pivot arms”

Lindahl in view of Yamamoto discloses a base pivot point fixed relative to the base and connecting the base and the first set of pivot arms. Ex. 1011, Lindahl, 2:12-22, 1:30-35; Ex. 1012, Yamamoto 1:63-2:3; Ex. 1007, p. 14. A POSITA would understand that a base pivot point that is fixed relative to the base and connects it with the set of pivot arms is ubiquitous with scissor lift mechanism designs. Ex. 1007, p. 14. Such a design is a required part of any scissor lift mechanism that is fixed to a base because is one of the main supports for the entire lift mechanism. *Id.* Therefore, a POSITA will be motivated to combine the base as disclosed in Yamamoto with Lindahl. *Id.*

¹⁷ Ex. 1012, Yamamoto Figures 2A and 2B; 1:63-2:3

(3) Element 1d3: “a platform pivot point fixed relative to the work surface platform and connecting the work surface platform and the set of pivot arms”

Both Lindahl and Yamamoto have a platform pivot point fixed relative to the work surface platform and connecting the work surface platform and the set of pivot arms. Ex. 1007, pp. 15-16; Ex. 1011, Lindahl 3:3-11; Ex. 1012, Yamamoto 1:68-2:3. As previously discussed, a platform pivot point is ubiquitous in scissor lift linkage design which would enable a POSITA to easily recognize such a design layout and exactly why both Lindahl and Yamamoto disclose it. Ex. 1007, p. 16. A POSITA would understand this pivot point exists merely by knowing that a scissor lift mechanism is involved in the design. *Id.* Indeed, Lindahl simply provides just one of many examples of such a non-inventive design layout. *Id.*

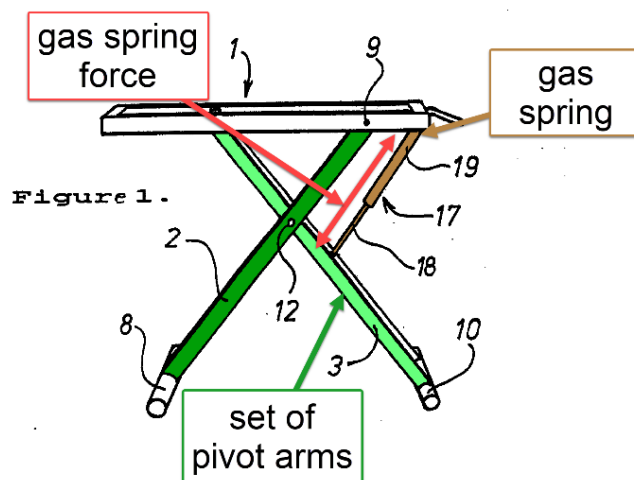
(4) Element 1d4: “a sliding mechanism on an end of an arm of the set of pivot arms between the end of the arm and either the work surface platform or the base”

Both Lindahl and Yamamoto disclose a sliding mechanism on an end of an arm of the first set of pivot arms between the end of the arm and either the work surface platform or the base. Ex. 1007, pp. 17–20; Ex. 1011, Lindahl Figure 1 and 2, 3:31-4; Ex. 1012, Yamamoto Figures 2A and 2B, 1:68-2:3. It is kinematically necessary as a part of the design of a scissor lift linkage to allow these pivot points to move in this way. Ex. 1007, pp. 19-20. The term “sliding mechanism” must be

interpreted to include rolling contact based on the language of the '926 Patent. *Id.* at p. 17. A POSITA would understand that a wheel is used for rolling contact (which is typically different from sliding contact). *Id.* at p. 18. A POSITA would also understand that scissor linkages can and often are made with rolling or sliding contact that function the same. *Id.*

(5) Element 1d5: “a gas spring that assists in elevation of the work surface platform by applying a force to rotate one of the set of pivot arms as part of the scissoring motion”

Lindahl discloses a gas spring that assists in the elevation of the work surface platform by applying a force to one of the first set of pivot arms as part of the scissoring motion. Ex. 1007, pp. 71-72; Ex. 1011, Lindahl 4:5-9:



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As shown above, Lindahl discloses a gas spring that is used to facilitate the movement of the scissor linkage and therefore work surface platform. The gas-spring of Lindahl is connected between the work surface platform and the pivot

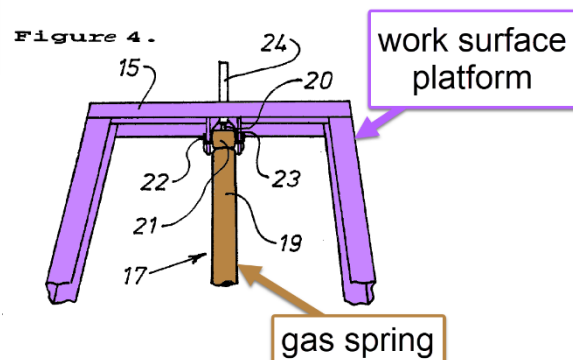
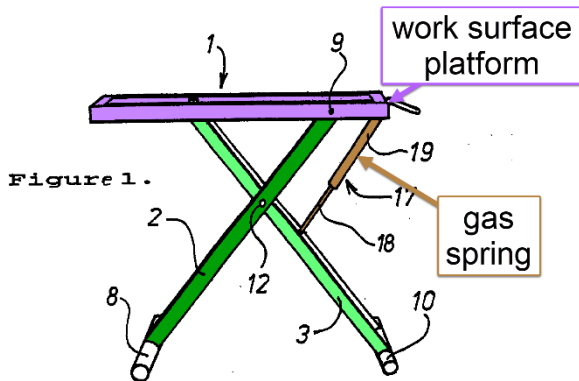
¹⁸ Ex. 1011, Lindahl Figure 1

arms which enables it to apply force to the pivot arms as well as the work surface platform as part of the scissoring motion. Ex. 1007, pp. 20-21. Lindahl also provides yet another teaching of the interchangeability of a gas-spring and a hydraulic cylinder. *Id.* A POSITA would easily understand that a lockable gas-spring is analogous to a piston-cylinder device. *Id.* A POSITA would also understand that a hydraulic or pneumatic cylinder is analogous to a piston-cylinder device. *Id.* Yamamoto also shows a piston-cylinder device between the work surface platform and the pivoting links.¹⁹ Such a commonplace design is widely known because it is often used for scissor lift mechanisms. Ex. 1007, p. 21.

(6) Element 1d6: “wherein one end of the gas spring is fixed to the work surface platform, wherein the gas spring acts as a locking device that holds the work surface platform at various vertical heights above the base”

Lindahl discloses that one end of the gas spring is fixed to the work surface platform, and wherein the gas spring acts as a locking device that holds the work surface platform at various vertical heights above the base. Ex. 1007, pp. 21-22; Ex. 1011. Lindahl 4:5-15:

¹⁹ Ex. 1012, Yamamoto Figure 2A element OS which is connected to R1 and LK



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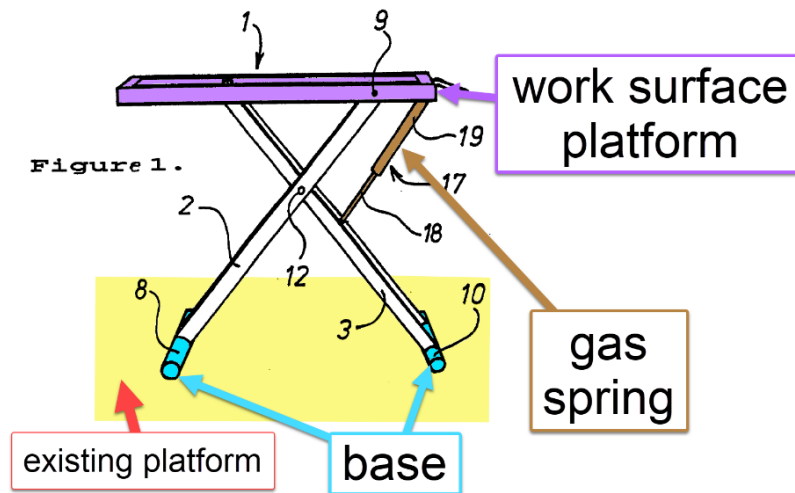
As shown above, Lindahl discloses the use of a gas spring to facilitate the movement of the scissor linkage. Ex. 1011, Lindahl. Specifically, the gas-spring cited is a locking gas-spring which is a common component that any POSITA would be very familiar with. Ex. 1007, p. 22. As Lindahl describes, the locking gas spring is used to set the work surface platform at various heights in ordinary usage of the Lindahl apparatus. Ex. 1011, Lindahl 4:5-15. A POSITA would understand that a hydraulic cylinder, such as the one used by Yamamoto, is also a piston cylinder device that can be used to lock the vertical position of the platform at any height within its ordinary range of motion. Ex. 1007, p. 22. The hydraulic cylinder of Yamamoto (item OS²¹) is a piston-cylinder device that is attached to the roller that engages with the work surface platform on one end as can be clearly seen in view 2A of Yamamoto. *Id.* A POSITA would understand that the hydraulic cylinder of Yamamoto could be replaced with a locking gas spring described in element 1d6 of Claim 1. *Id.*

²⁰ Ex. 1011, Lindahl, Figures 1 and 4

²¹ Ex. 1012, Yamamoto 2:3

(7) Element 1d7: “wherein the gas spring is under the work surface platform and above the existing platform”

Lindahl in view of Yamamoto discloses that the gas spring is under the work surface platform and above the existing platform. Ex. 1007, pp. 22-23; Ex. 1011, Lindahl 1:3-6, 13-14, 3:1-3, 4:5-9; Ex. 1012, Yamamoto Figure 2A, 1:53-60:



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As shown above, Lindahl discloses a scissor lift platform with a gas spring located both underneath and above the work surface platform. Therefore, a POSITA would recognize that a scissor lift platform can have gas springs placed either underneath or above the work surface platforms (such as those described in Lindahl and Clarke).

²² Ex. 1011, Lindahl Figure 1

2. Dependent Claims 2-10, 12, and 14-16 of the '926 Patent are Obvious Over Lindahl in View of Yamamoto and in Further View of HJ Zottel.

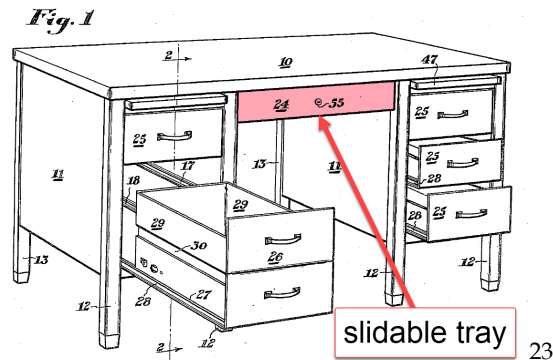
Claims 2-10, 12, and 14-16 of the '926 Patent are obvious over Lindahl in view of Yamamoto and in further view of HJ Zottel as all their elements are disclosed by those references and their combinations. *See generally* Ex. 1007, pp. 23–111. Claims 2-10, 12, and 14-16 depend on Claim 1 as they all relate to the same desktop workplace. Their additional elements were also disclosed in the prior art, and a POSITA would have been prompted to combine them in the same way as the dependent Claims do as set forth in detail in Mr. Macdonald's expert declaration. *Id.*

a) Claim 2

(1) Element 2a: “wherein the slidable tray is mounted to an underside of the work surface platform with a slider such that the slidable tray is selectively positionable between the stored position under the work surface platform and the extended position that is outward and lowered with respect to the work surface platform”

Lindahl in view of Yamamoto and in further view of HJ Zottel and the knowledge of a POSITA already disclose that the slidable tray is mounted to an underside of the work surface platform with a slider such that the slidable tray is

selectively positionable between the stored position under the work surface platform and the extended position that is outward and lowered with respect to the work surface platform. Ex. 1011, Lindahl Figures 1 and 2, 1:3-6, 13-14; Ex. 1012, Yamamoto Figure 2A, 1:53-60; Ex. 1007, p. 23-26:

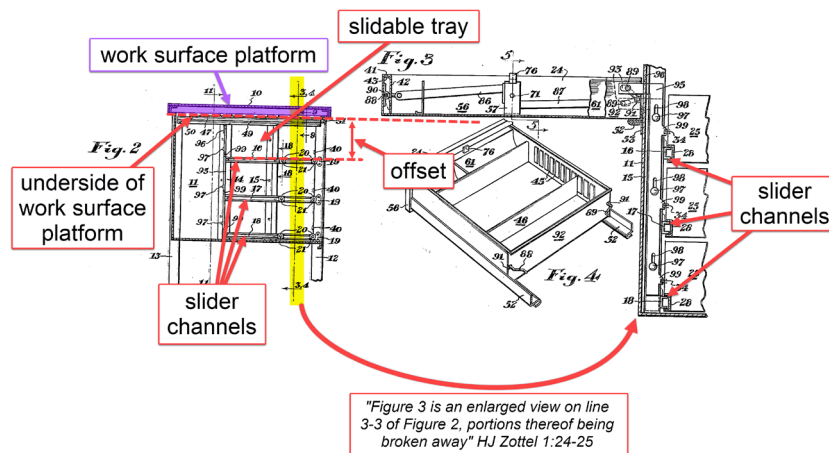


As shown above, HJ Zottel discloses a slidable tray (drawer 24) mounted under the work surface platform (desk top 10). Combining the teachings of HJ Zottel with the work surface platforms described in Lindahl and Yamamoto would motivate a POSITA to use a top-mount drawer style because it is the only reasonable design choice to make with the aforementioned arrangement. Ex. 1007, p. 24. A POSITA would further understand that drawers are a common feature that are added to any desk design (such as the desktop described by HJ Zottel). *Id.* at p. 25. Accordingly, the addition of a drawer to mount under a desk top surface is not inventive. *Id.*

²³ Ex. 1013, HJ Zottel; 1:4-6; 1:47-50; 2:9-11

- (2) Element 2b: “wherein the slider includes a channel offset from the underside of the work surface platform, forming a gap between the slidable tray and the underside of the work surface platform”

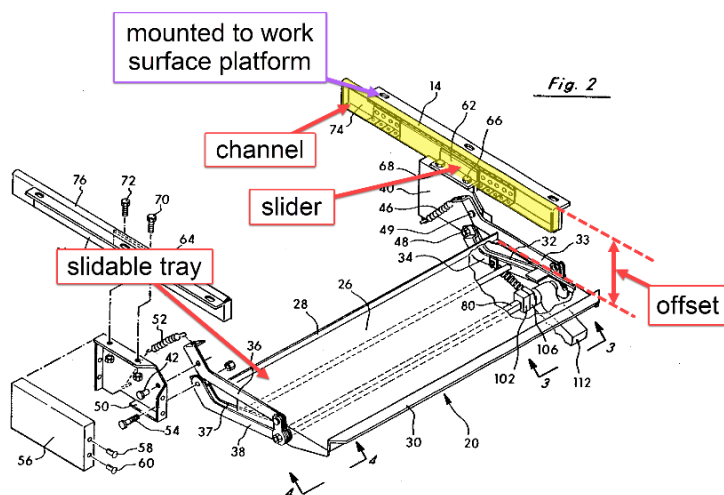
Lindahl in view of Yamamoto and in further view of HJ Zottel and the knowledge of a POSITA already disclose that the slider includes a channel offset from the underside of the work surface platform, forming a gap between the slidable tray and the underside of the work surface platform. Ex. 1011, Lindahl Figures 1 and 2, 1:3-6, 13-14; Ex. 1012, Yamamoto Figure 2A, 1:53-60; Ex. 1007, p. 26:



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As discussed previously, a POSITA would understand the well-known options and permutations of drawer designs and mounting including mounting on the bottom, the side, or the top of the drawer. Ex. 1007, pp. 26-27. A POSITA would also be motivated to use a top-mounted drawer when adding the teachings of HJ Zottel with Lindahl in view of Yamamoto. *Id.* at p. 27.

Additionally, top-mounted drawers were well known; an example of which is shown in US 5,294,087 to Drabczyk (which shows that there is a channel offset from the underside of the work surface platform):



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As shown above, Drabczyk demonstrates a well-known slidable tray arrangement wherein the slider has a channel which is offset from the underside of the work surface platform. Ex. 1007, pp. 28-29. This offset forms a gap between the slidable tray and the underside of the work surface platform. *Id.* Therefore, a POSITA would understand (with or without Drabczyk) that drawers and slidable trays are regularly mounted and arranged in this way. *Id.* Since every element of Claim 2 appears in the prior art references (and their combinations) discussed above, Claim 2 is rendered obvious.

b) Claim 3

Claim 3 is dependent on the desktop workplace of Claim 2. Since (Claim 2 is dependent on the desktop workplace of Claim 1, Claim 3 is necessarily also

Continued from the previous page

²⁴ Ex. 1013, HJ Zottel; 2: 14-20

²⁵ Ex. 1017, Drabczyk Figure 2; 3:36-4; 3:65-4:6

dependent on Claim 1 for the same reasons. However, the additional elements of Claim 3 are also present in the prior art references discussed below:

- (1) **Element 3a: “further comprising a bracket fixed to the underside of the work surface platform, wherein the channel is mounted to the bracket such that the channel is offset from the underside of the work surface platform”**

Lindahl in view of Yamamoto and in further view of HJ Zottel and the knowledge of a POSITA already disclose a bracket fixed to the underside of the work surface platform, wherein the channel is mounted to the bracket such that the channel is offset from the underside of the work surface platform. Ex. 1011, Lindahl Figures 1 and 2, 1:3-6, 13-14; Ex. 1012, Yamamoto Figure 2A, 1:53-60; Ex. 1007, pp. 28-30. As previously discussed, a POSITA would understand the ordinary ways in which drawers are mounted on a work surface platform such as Lindahl or Yamamoto (which include mounting on the bottom, the side, or the top). *Id.* at p. 28. Additionally, combining the teachings of HJ Zottel with Lindahl in view of Yamamoto would motivate a POSITA to use a top-mounted drawer. *Id.* When mounted to the top, a POSITA would also understand that this arrangement will generally include a bracket that mounts the slider channel to the underside of the work surface platform. *Id.* Such a design is the natural result of well-known drawer mounting designs. *Id.*

Drabczyk also demonstrates a well-known slidable tray arrangement wherein the slider has a bracket that is fixed to the underside of the work surface platform

and fixed to the slider mechanism. Ex. 1017, Drabczyk Figure 2; 3:36-41, 3:65-4:6. Such an arrangement positions the slider channel to be offset from the underside of the work surface platform. Ex. 1007, p. 30. This offset forms a gap between the slidable tray and the underside of the work surface platform. *Id.* Accordingly, a POSITA would understand (with or without Drabczyk) that drawers and slidable trays are regularly mounted and arranged in this way and would have been motivated to do the same. *Id.* Since every element of Claim 3 appears in the prior art references (and their combinations) discussed above, Claim 3 is rendered obvious.

c) Claim 4

(1) Element 4a: “wherein the set of pivot arms is a first set of pivot arms, the desktop workspace further comprising”

Both Lindahl and Yamamoto already disclose a set of pivot arms that act as a first set of pivot arms. Ex. 1007, pp. 30-32; Ex. 1011, Lindahl Figure 1; 3:1-3, 11-20; Ex. 1012, Yamamoto Figures 2A and 2B; 1:63-2:3. A POSITA would understand that the pivot arms disclosed by Lindahl and Yamamoto would allow for a scissoring motion to be accomplished.

(a) Element 4a1: “a second set of pivot arms”

At least Lindahl discloses a second set of pivot arms. Ex. 1007, p. 32; Ex. 1011, Lindahl 3:12-20. A POSITA would understand that the scissor lift mechanism described in Lindahl is of typical and ordinary design. Ex. 1007, p. 33. A POSITA would further understand and be familiar with the fact that scissor lift

mechanisms (such as a common scissor lift machine or even this small table) are commonly built with a pair of scissoring links. *Id.* Such a design provides lateral stability to the machine over what would be typical of a single set of scissoring links. *Id.*

(b) Element 4a2: an element that connects the first set of pivot arms to the second set of pivot arms

Lindhahl discloses an element that connects the first set of pivot arms to the second set of pivot arms. Ex. 1007, p. 33; Ex. 1011, Lindahl 3:12-20, 3:3-10. A POSITA would understand that an element connecting the pair of scissor arms is a typical and ordinary design for scissor lift mechanisms. Ex. 1007, p. 34. Since every element of Claim 4 appears in the prior art references (and their combinations) discussed above, Claim 4 is rendered obvious.

d) Claim 5

(1) Element 5a: “wherein the work surface platform forms an upper work surface”

Both Lindahl and Yamamoto disclose that the work surface platform forms an upper work surface. Ex. 1007., p. 35-37; Ex. 1011, Lindahl 3:1-3, 3:3-10; Ex. 1012, Yamamoto Figure 2A, 1:53-60. Even if it is argued that Lindahl shows a frame, but the figures do not show the upper work surface, Lindahl still makes it clear that, “a tabletop is intended to be placed” on the frame member of Lindahl which itself is part of the work surface platform and is an upper work surface. Ex. 1011, Lindahl 3:1-3. Yamamoto also shares the same type of table which has a

work surface platform. Accordingly, both Lindahl and Yamamoto demonstrate that their respective work surface platforms form upper work surfaces.

(2) Element 5b: “wherein the gas spring is completely covered by a profile of the work surface platform when viewed from above the upper work surface relative to the base, the profile of the work surface platform being defined by an outer perimeter of the upper work surface”

Both Lindahl and Yamamoto already disclose that the gas spring (or piston cylinder device) is completely covered by a profile of the work surface platform when viewed from above the work surface relative to the base, the profile of the work surface platform being defined by an outer perimeter of the upper work surface. Ex. 1011, Lindahl Figure 1, 1:3-6, 13-14; 4:5-9; Ex. 1012, Yamamoto 1:53-60, 1:68-2:5; Ex. 1007, p. 37-39. Even if it is argued that Lindahl shows a frame but the figures do not show the upper work surface, Lindahl makes it clear that, “a tabletop is intended to be placed” on the frame member of Lindahl which itself is part of the work surface platform and is a upper work surface. Ex. 1011, Lindahl 4:5-9. Yamamoto discloses the same limitation. Ex. 1012, Yamamoto, 1:53-60, 1:68-2:5.

In order to avoid creating pinch points, a POSITA would understand that the table top that is added to the upper frame will be at least as broad as the frame that supports it. Ex. 1007, p. 38. A POSITA would also understand that, from a design

perspective, a gas spring can be installed in place of a hydraulic cylinder because both devices are different in their behavior and certain applications may show that one is favorable over the other. *Id.* Finally, a POSITA would understand that the hydraulic cylinder is interchangeable with a gas spring which would make it completely covered by the profile of the work surface platform when viewed from above. *Id.* at p. 90. Since every element of Claim 5 appears in the prior art references (and their combinations) discussed above, Claim 5 is rendered obvious.

e) Claim 6

(1) Element 6a: “wherein the gas spring is a first spring”

Lindahl already discloses a gas spring that is a first spring. Ex. 1007, p. 40; Ex. 1011, Lindahl Figure 1, 4:5-15.

(2) Element 6b: “the desktop workspace comprising a pair of springs attached to the height adjustment mechanism to assist in the elevation of the work surface platform, the pair of springs including the first spring and a second spring”

A POSITA would recognize the addition of a second gas spring as an ordinary design choice with certain advantages such that the desktop workspace comprises a pair of springs attached to the height adjustment mechanism to assist in the elevation of the work surface platform, the pair of springs including the first spring and a second spring. Ex. 1007, pp. 40-44. Additionally, Lindahl in view of

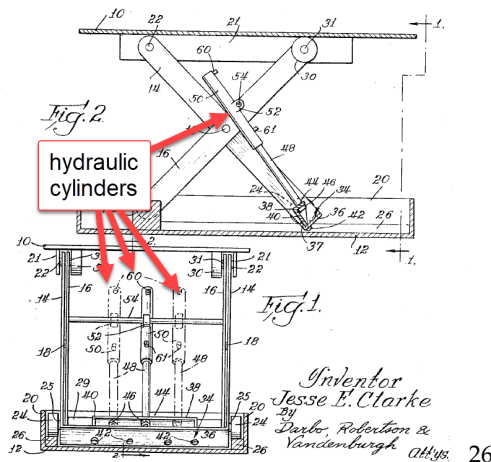
Yamamoto, and in further view of Clark and other references such as CN203934825 to Zhang disclose a second gas spring such that the desktop workspace comprises a pair of springs attached to the height adjustment mechanism to assist in the elevation of the work surface platform, the pair of springs including the first spring and a second spring. *Id.* at pp. 40-41.

A POSITA would recognize the addition of a second gas spring will allow the pair of gas springs to be arranged such that they are much closer to their respective set of pivot arms. *Id.* Further, the second gas spring allows the aforementioned arrangement to be accomplished without compromising the overall balance of the mechanism as a whole. *Id.* A POSITA familiar with the principles of linkage design (such as a scissor lift linkage) will understand these principles and see this motivation to provide a second gas spring as an optional design choice. *Id.* A POSITA would also be motivated to use a pair of gas springs because it would increase the amount of lifting assistance that is provided without detracting from the overall compactness of the stowed lift assembly. *Id.* A POSITA will recognize that were a single larger locking gas spring to be used instead of two locking gas springs the larger gas spring will prevent the scissor linkage from collapsing to the same extent as it could with a smaller diameter actuator. *Id.*

Further, a POSITA will also be motivated to use a pair of gas springs as this increases the amount of lifting assistance that is provided without detracting from the overall compactness of the stowed lift assembly. *Id.* A POSITA will recognize that were a single larger locking gas spring to be used instead of two locking gas

springs the larger gas spring will prevent the scissor linkage from collapsing to the same extent as it could with a smaller diameter actuator. *Id.*

In addition to this, a POSITA could look to other pieces of prior art that make this optional design choice. *Id.* For example, US 3,282,566 to Clarke discloses a scissor lift platform with as many as three fluid power cylinders acting in parallel. Ex. 1014, Clarke Figures 1 and 2, 1:56-59, 2:67-69. *Id.*



Further, a POSITA could also look to CN203934825 to Zhang circa 2014, which discloses the use of a pair of gas springs to facilitate the movement of a scissoring linkage style platform. The gas springs are locking gas springs and are tied together through the use of Bowden cables in a manner well known and in accordance with typical engineering practice. Ex. 1007, p. 42; Ex. 1016, Zhang Abstract. Zhang discloses the use of a pair of locking gas springs to adjustably set the height of a desktop work surface.

²⁶ See Ex. 1014, Clarke 2:67-69, 1:56-59

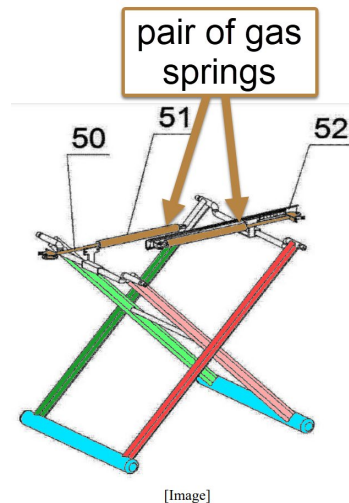


Figure 5

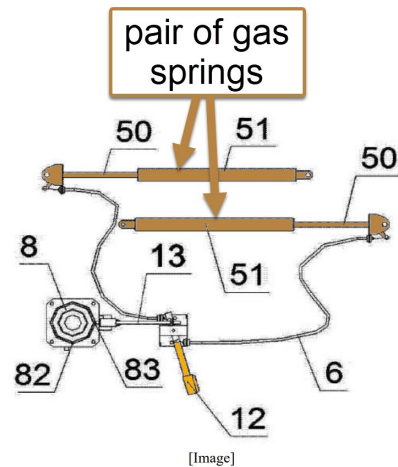


Figure 8

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Even without the disclosure of Zhang or Clarke, a POSITA would readily be aware of and familiar with the optional design choice of adding a second gas spring to Lindahl. Ex. 1007, pp. 43-44. Since every element of Claim 6 appears in the prior art references (and their combinations) discussed above, Claim 6 is rendered obvious.

f) Claim 7:

(1) Element 7a: “wherein the sliding mechanism is a first sliding mechanism”

Lindahl in view of Yamamoto discloses the first sliding mechanism. Ex. 1011, Lindahl 3:31–4:3; Ex. 1012, Yamamoto Figure 2A, 1:68-2:3; Ex. 1007, p. 44. Both Lindahl and Yamamoto have a first sliding mechanism, which is what allows the top portion of the scissor links to translate relative to the work surface platform. Ex. 1011, Lindahl 3:31-4:3; Ex. 1007, p. 45. Such a mechanism is typical

²⁷ Ex. 1016, Zhang Figure 5 and 8, [0009]

in scissor linkage design that any POSITA would readily understand is ubiquitous. Ex. 5, p. 45.

(2) Element 7b: “the desktop workspace further comprising a second sliding mechanism”

Lindahl in view of Yamamoto also discloses a second sliding mechanism. Ex. 1011, Lindahl 3:31–4:3; Ex. 1012, Yamamoto Figure 2A, 1:68-2:3; Ex. 1007, pp. 44-45. Yamamoto discloses a second sliding mechanism that is operable between the pivot arms and the base. Ex. 1012, Yamamoto 1:68-2:3. Such a mechanism is typical in scissor linkage design that any POSITA would readily understand is ubiquitous. Ex. 1007, p. 45.

(3) Element 7c: “wherein either the first sliding mechanism or the second sliding mechanism is attached or slides along the work surface platform”

Lindahl in view of Yamamoto discloses that either the first or the second sliding mechanism is attached or slides along the work surface platform. Ex. 1011, Lindahl 3:31–4:3; Ex. 1012, Yamamoto Figure 2A, 1:68-2:3; Ex. 1007, p. 45. As previously discussed, both Lindahl and Yamamoto show that the first sliding mechanism(s) are attached to or slide along the work surface platform. Ex. 1007, p. 45.

(4) Element 7d: “and the other of the first sliding mechanism and the second sliding mechanism is attached to or slides along the base”

Lindahl in view of Yamamoto already discloses the other first and second sliding mechanism is attached to or slides along the base. Ex. 1011, Lindahl 3:31–4:3; Ex. 1012, Yamamoto Figure 2A, 1:68-2:3; Ex. 1007, p. 45. As previously discussed, both Lindahl and Yamamoto show that the first sliding mechanism(s) are attached to or slide along the work surface platform. Ex. 1011, Lindahl 3:31-4:3. Further, Yamamoto has a second sliding mechanism that is attached to or slides along the base. Ex. 1012, Yamamoto 1:68-2:3. The combination of Lindahl in view of Yamamoto would incorporate the base of Yamamoto. Ex. 1007, p. 46. Consequently, it would also incorporate the sliding mechanism in the base of Yamamoto *Id.* Since all elements of Claim 7 appear in the prior art references (and their combinations) discussed above, Claim 7 is rendered obvious.

g) Claim 8

(1) Element 8a: “wherein the scissoring motion when raising and lowering the work surface platform to various heights of the height adjustment mechanism moves the work surface platform in a straight vertical direction relative to the base”

Lindahl discloses a straight-line vertical motion. Ex. 1011, Lindahl Figure 1, 2:12-22. Yamamoto discloses that the scissoring motion when raising and lowering

the work surface platform to various heights of the height adjustment mechanism moves the work surface platform in a straight vertical line relative to the base. Ex. 1012, Yamamoto Figures 2A and 2B, 1:61–2:9; Ex. 1007, pp. 46-48. A POSITA would recognize that the scissor mechanism of Yamamoto moves the work surface platform in a straight vertical line relative to the base (a feature typical of scissor lifting mechanisms). Ex. 1007, pp. 48. Since all elements of Claim 8 appear in the prior art references (and their combinations) discussed above, Claim 8 is rendered obvious.

h) Claim 9

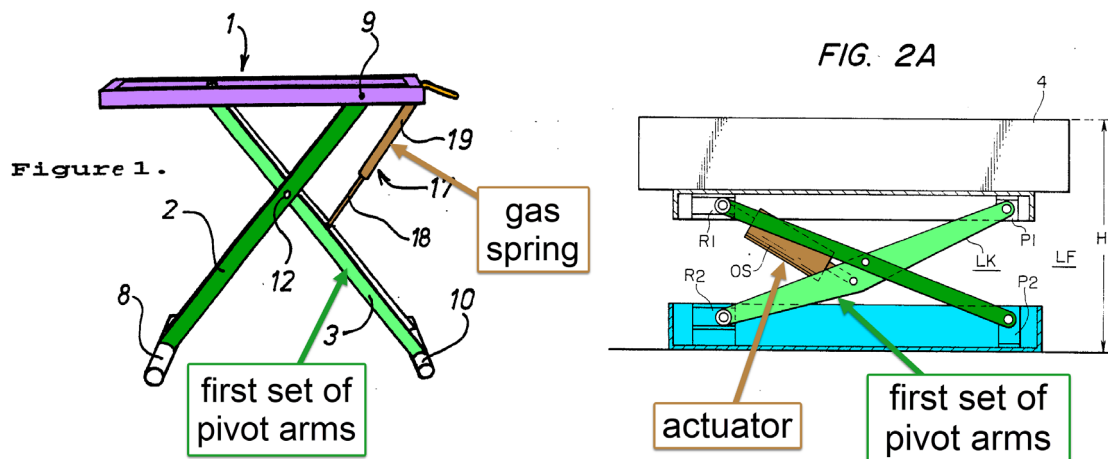
i) Element 9a: “wherein the slidable tray protrudes out, down, and parallel to the work surface platform in the extended position”

Lindahl in view of Yamamoto, and in further view of HJ Zottel already show that the slidable tray protrudes out, down, and parallel to the work surface platform in the extended position. Ex. 1007, pp. 48-50; Ex. 1011, Lindahl Figure 1, 3:1-3; Ex. 1012, Yamamoto Figure 2A, 1:53-60; Ex. 1013, HJ Zottel 1:4-6, 1:47-50, 2:9-11. A POSITA would recognize that the slidable tray of HJ Zottel could protrude out, down, and parallel from work surface platforms (such as those described in Lindahl and Yamamoto). Since all elements of Claim 9 appear in the prior art references (and their combinations) discussed above, Claim 9 is rendered obvious.

j) **Claim 10**

- (1) **Element 10a: “wherein the gas spring is attached directly to the one of the set of pivot arms”**

Lindahl in view of Yamamoto discloses that the gas spring is attached directly to one of the first set of pivot arms. Ex. 1011, Lindahl 4:10-12, Ex. 1012, Yamamoto, Figures 1 and 2A; Ex. 1007, p. 50:



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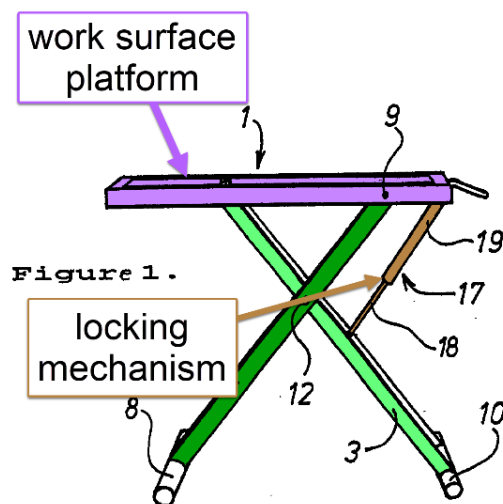
As shown above, the gas spring is attached directly to one of the first set of pivot arms. The gas spring has a bottom part 18 (the rod end) which is pivotally connected to leg member 3, which is one of the first set of pivot arms. Additionally, Yamamoto Figure 2A shows that the piston cylinder style actuator is directly connected to the first set of pivot arms. Since all the elements of Claim 10 appear in the prior art references discussed above, Claim 10 is rendered obvious

²⁸ Ex. 1011, Lindahl Figure 1; Ex. 1012, Yamamoto Figure 2A

k) Claim 12

- l) Element 12a: “further comprising a height adjustment locking mechanism that holds the work surface platform at various vertical heights above the base”**

Lindahl and Yamamoto already disclose a height adjustment locking mechanism that holds the work surface platform at various vertical heights above the base. Ex. 1007, p. 102; Ex. 1011, Lindahl Abstract, 4:5-9; Ex. 1012, Yamamoto Figure 2A:



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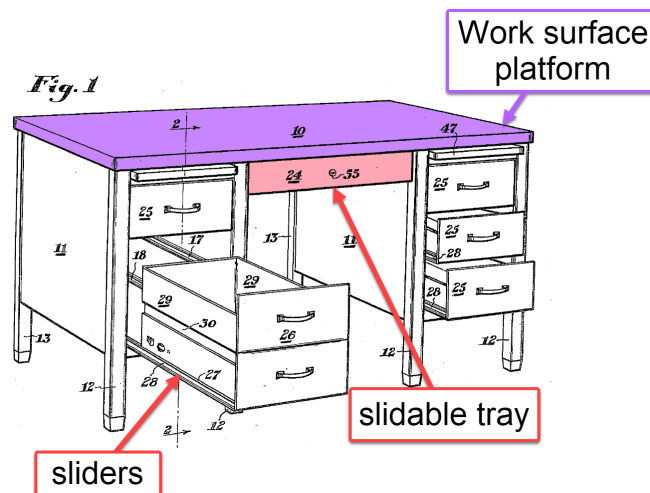
As shown above Lindahl discloses the use of a locking gas spring to hold the work surface platform at various vertical heights above the base. Since all the elements of Claim 12 appear in the prior art references discussed above, Claim 12 is rendered obvious.

²⁹ Ex. 1011, Lindahl Figure 1

m) **Claim 14**

- (1) **Element 14a: “further comprising two sliders that connect the slidable tray to the work surface platform”**

Lindahl in view of Yamamoto and in further view of HJ Zottel and Drabczyk discloses two sliders that connect the slidable tray to the work surface platform. Ex. 1011, Lindahl Figure 1, 1:3-6, 13-14; Ex. 1012, Yamamoto 1:53-60; Ex. 1007, p. 52-54:



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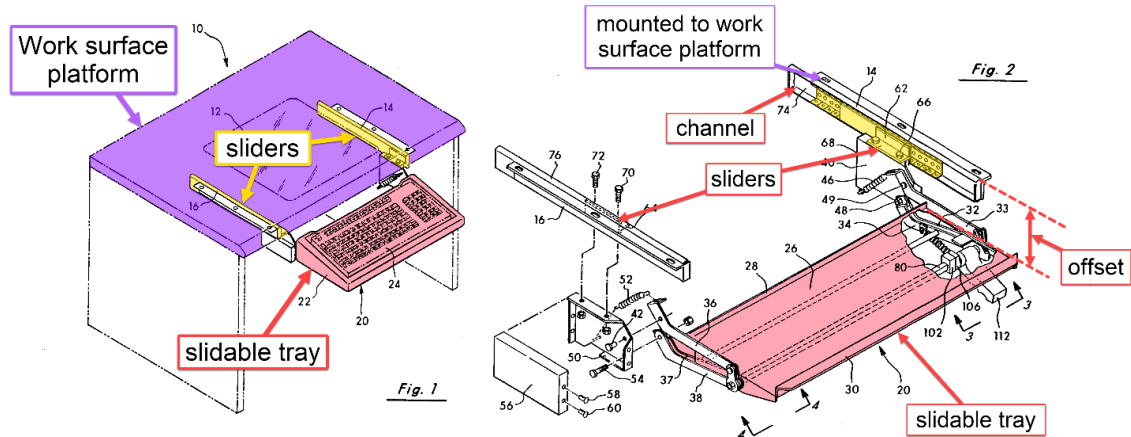
A POSITA would easily understand the ordinary permutations of drawer mounts (i.e. bottom mount, side, mount, and top mount). Ex. 1007, pp. 52-53. Additionally, combining the teachings of HJ Zottel with the combination of Lindahl in view of Yamamoto would motivate a POSITA to use a top-mount drawer because that is the only structure available to mount a drawer to in such a combination. *Id.* at p. 53. Therefore, a POSITA would be motivated to use sliders to connect the slidable tray to a work surface platform (such as that described in

Lindhahl or Yamamoto). *Id.* at p. 53. Put plainly, a POSITA would be motivated to include a top-mounted drawer in the typical and traditional style (i.e. with a pair of sliders) when combining the teachings of HJ Zottel with Lindahl in view of Yamamoto. *Id.* at p. 54.

(2) Element 14b: “wherein the two sliders operate in parallel to facilitate selectively positioning the slidable tray between the stored position under the work surface platform and the extended position that is outward and lowered with respect to the work surface platform”

Lindhahl in view of Yamamoto and in further view of HJ Zottel already discloses that the two sliders operate in parallel to facilitate selectively positioning the slidable tray between the stored position under the work surface platform and the extended position that is outward and lowered with respect to the work surface platform. Ex. 1007, pp. 54-57; Ex. 1011, Lindahl Figure 1, 1:3-6, 13-14; Ex. 1012, Yamamoto 1:53-60; Ex. 1013, HJ Zottel 2:9-1, 2:17-20. A POSITA can also look to prior art such as Drabczyk (shown below) which also discloses the use of two sliders but demonstrates that the sliders operate in parallel to facilitate positioning the tray between a stored position under the work surface or an extended position where it is spaced outward and lowered with respect to the work surface platform. Ex. 1007, p. 55-57.

Continued from the previous page
30 Ex. 1013, HJ Zottel, 2:9-11



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Since all the elements of Claim 14 appear in the prior art references discussed above, Claim 14 is rendered obvious.

n) Claim 15

- (1) **Element 15a: wherein the one end of the gas spring is fixed relative to an underside of the work surface platform such that the one end of the gas spring acts on the underside of the work surface platform**

Lindahl in view of Yamamoto and in further view of HJ Zottel already discloses that one end of the gas spring is fixed relative to an underside of the work surface platform such that the one of the gas spring acts on the underside of the work surface platform. Ex. 1011, Lindahl Abstract, 4:5-15, 4:23-27; Ex. 1012, Yamamoto Figure 2A; Ex. 1007 pp. 57-58. As previously discussed, Lindahl describes a gas spring fixed relative to the underside of the work surface platform. Ex. 1007, p. 58. This is accomplished through the use of a bracket as described in

³¹ Ex. 1017, Drabczyk Figures 1 and 2; 3:36-41, 3:65-4:6

Lindahl. *Id.* Since all the elements of Claim 15 appear in the prior art references discussed above, Claim 15 is rendered obvious.

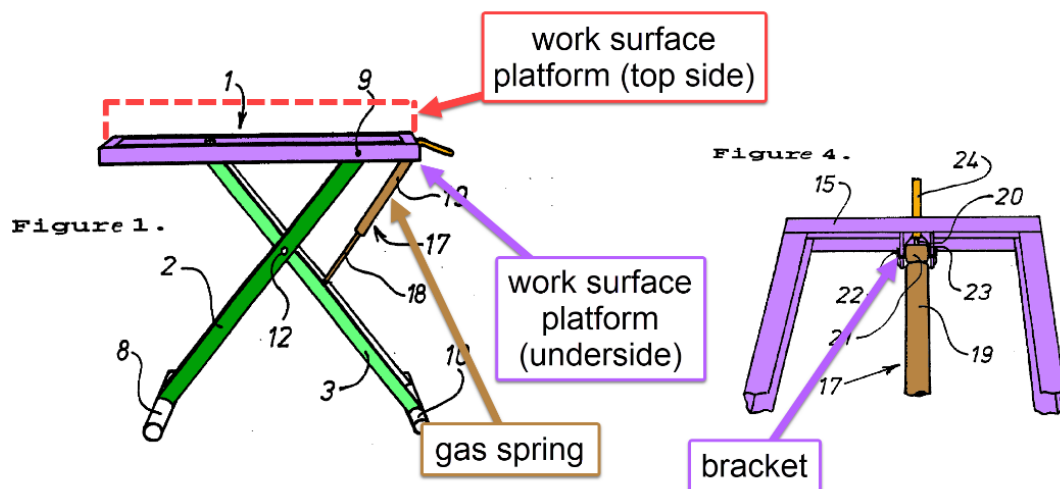
o) Claim 16

Claim 16 is dependent on the desktop workplace of Claim 15. Since Claim 15 is dependent on the desktop workplace of Claim 1, Claim 16 is necessarily also dependent on Claim 1 for the same reasons. However, the additional elements of Claim 16 are also present in the prior art references discussed below.

(1) Element 16a: “wherein the one end of the gas spring is fixed to the work surface platform via a bracket mounted to the underside of the work surface platform”

Lindahl already discloses that one end of the gas spring is fixed to the work surface platform via a bracket fixed to an underside of the work surface platform.

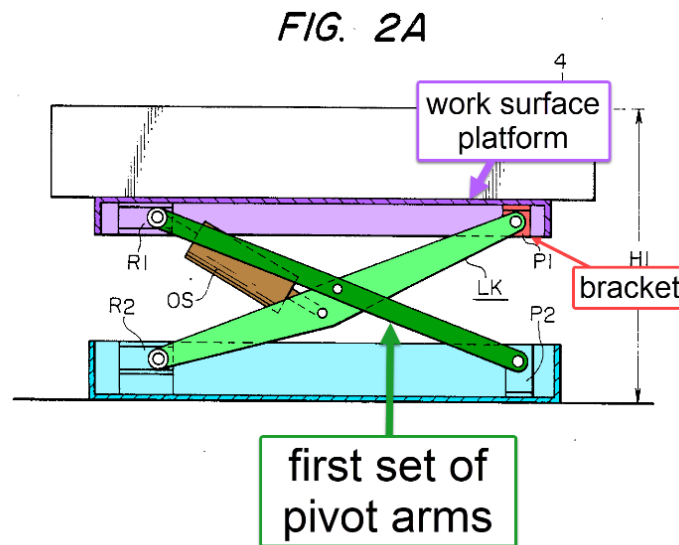
Ex. 1007, pp. 58-60:



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³² Ex. 1011, Lindhal Abstract; 4:5-15, 4:23-27

Yamamoto also teaches mounting the pivot arms to the bottom side of the work surface platform using a bracket:



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A POSITA would understand that the gas spring could easily be mounted to the bottom of the work surface platform using the same methodology. Ex. 1007, p. 60. Since all the elements of Claim 16 appear in the prior art references discussed above, Claim 16 is rendered obvious.

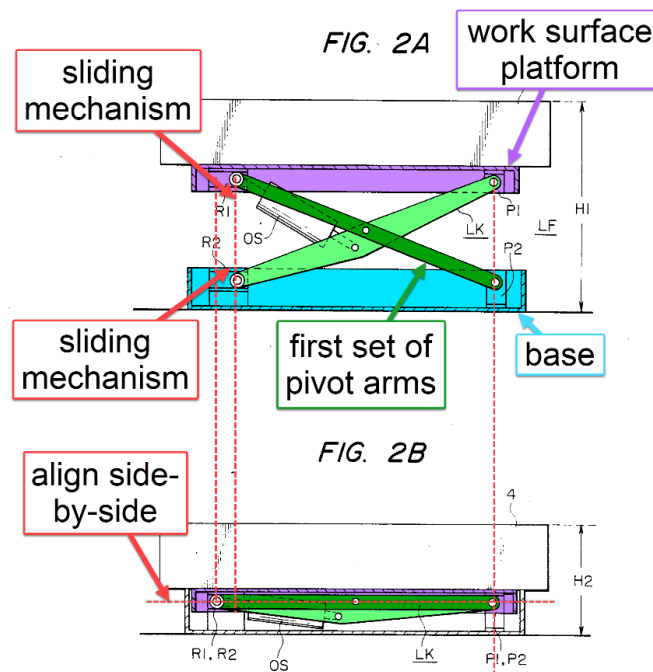
3. Independent Claim 18 is Obvious Over Lindahl in View of Yamamoto and in Further View of HJ Zottel

Independent Claim 18 of the '926 Patent is obvious over Lindahl in view of Yamamoto and in further view of HJ Zottel. Ex. 1007, pp. 60-65. The only element Claim 18 does not share in common with Claim 1 is 18d6.

³³ Ex. 1012, Yamamoto Figure 2A; 1:68-2:5

- a) **Element 18d6: “wherein the gas spring, the set of pivot arms, the base pivot point, and the platform pivot point align side-by-side when the desktop workspace is in a fully lowered position such that the desktop workspace adjusts vertically”**

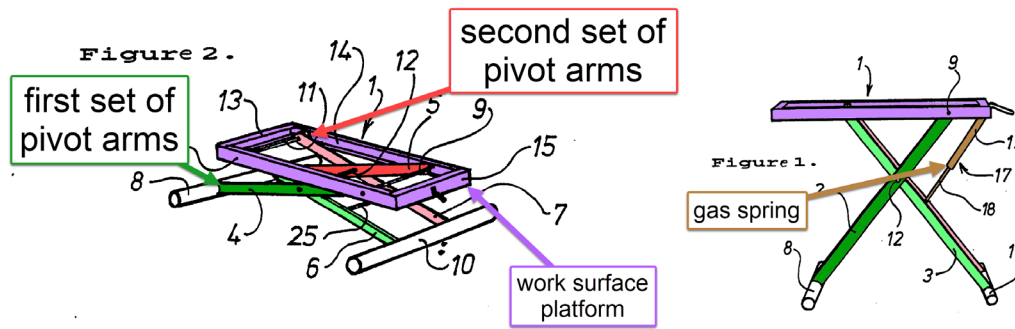
Lindahl in view of Yamamoto discloses that the gas spring, the first set of pivot arms, the base pivot point, and the platform pivot point align side-by-side when the desktop workspace is in a fully lowered position such that the desktop workspace adjusts vertically. Ex. 1007, pp. 61-65. the Yamamoto linkage is arranged such that the first set of pivot arms, the base pivot point, and the platform pivot point align perfectly side-by-side when the workspace is in a fully lowered position:



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³⁴ Ex. 1012 Yamamoto Figures 2A and 2B, 1:53-64

The locking gas spring of Lindahl is mounted in a way that the gas spring pivot points will be in perfect horizontal alignment with the other pivot points once it is permitted to fully collapse as the linkage in Yamamoto does.



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Lindahl uses a gas spring to assist in the lifting of the work surface platform as opposed to the hydraulic cylinder that Yamamoto uses. Further, like Yamamoto, the top pivot point of the gas spring of Lindahl is aligned with the rest of the pivot points in the work surface platform frame. Ex. 1007, p. 64. In accordance with Yamamoto's focus on compactness, (which is a common reason why scissor lift mechanisms are used), a POSITA would be motivated to combine the linkage of Yamamoto with the linkage of Lindahl in a way that the scissor arms will line up flat when the platform is fully lowered. *Id.*

Further, a POSITA would understand that gas springs are constant force devices, unlike the hydraulic cylinders such as used in Yamamoto. *Id.* A POSITA would also recognize that the actuator has the worst mechanical advantage for lifting the platform at the bottom and that a gas spring present challenges in lifting the platform. *Id.* Therefore, the lifting assistance provided by a nearly horizontal gas spring would be outweighed by the loss of compactness offered by keeping the

³⁵ Ex. 1011, Lindahl Figure 1; 4:5-15

gas spring in a non-horizontal orientation. *Id.* at p. 65. This dilemma would motivate a POSITA to combine the linkages of both Yamamoto and Lindahl to allow the scissor arms to line up flat when the platform is fully lowered. *Id.* at p. 64.

Accordingly, the combination of Lindahl in view of Yamamoto is configured in a way that aligns the gas spring, the first set of pivot arms, the base pivot point, and the platform pivot point align side-by-side when the desktop is in a fully lowered position. *Id.* Since it is the very nature of scissor lift mechanisms generally to adjust vertically and the aforementioned combination offers a clear solution to the complications discussed above, Claim 18 is rendered obvious over Lindahl in view of Yamamoto.

4. A POSITA Would Have Been Motivated to Combine Lindahl, Yamamoto, and HJ Zottel

A POSITA would have been motivated to combine Lindahl, Yamamoto, and HJ Zottel. *See* Ex. 1007, p. 2, ¶ 65. Lindahl and Yamamoto both describe vertically adjustable platforms that use a scissor linkage and cylindrical actuator. Ex. 1011, Lindahl; Ex. 1012, Yamamoto. Accordingly, they are highly compatible with each other. Ex. 1007, p. 1, ¶ 65. Yamamoto shows greater vertical adjustability afforded by the ability to lower to a point where the pivot points are aligned. Ex. 1012, Yamamoto. Combining Yamamoto with Lindahl is an obvious next step because it would allow for greater height adjustability as well as allowing the Lindahl table to store more compactly. Ex. 1007, p. 1, ¶ 65. When combined, the gas spring of

Lindahl will also be aligned with the links as in Yamamoto leading to maximum compactness for storage. *Id.*

Additionally, a POSITA would be motivated to combine the base of Yamamoto with the Lindahl mechanism to gain additional advantages. *Id.* at ¶ 66. For example, using Lindahl on a delicate surface would make the legs of the apparatus cause concentrated pressure at certain points. *Id.* Such pressure would inevitably cause depression marks in material such as carpet if applied continuously over time. *Id.* This potential issue would be easily recognized by a POSITA and would ultimately motivate the POSITA to incorporate the base as taught by Yamamoto (which presents a broad base surface). *Id.* at p. 2, ¶ 67. The broader base surface would evenly distribute the pressure, thereby mitigating the potential damage to the surface supporting the apparatus. *Id.* A POSITA would recognize that the legs of Lindahl would present the same threat of indentation as any other piece of furniture on carpet. *Id.*

A POSITA would be further motivated to combine HJ Zottel with the combination of Lindahl in view of Yamamoto because HJ Zottel discloses a desktop with drawers underneath. Ex. 1007, p. 2, ¶ 67; Ex. 1013, HJ Zottel. A POSITA would understand that a desktop with drawers underneath is a well-known design element that can be integrated with a scissor lift platform. Ex. 1007, p. 2, ¶ 67. A POSITA would also understand that the depth of the drawers would, at most, be the width of the scissor links so that the drawers do not prevent the assembly from being fully lowered. *Id.* HJ Zottel is one of many examples of the well-known design of having drawers integrated with the desk. *Id.*

Further, when combining the teachings of HJ Zottel with the combination of Lindahl in view of Yamamoto, a POSITA would be motivated to use a top-mount drawer (which is considered to be the most convenient mount type for the aforementioned desk style). *Id.* at p. 2, ¶ 68. A bottom mounted drawer slide would not be suitable as there is no structure below to support the drawer. *Id.* However, a side mounted drawer is feasible but would require the installation of a top-mounted bracket providing structure to support the drawer. *Id.* Such a design would be functionally equivalent to a top-mounted drawer. *Id.* Based on the above, a POSITA will be motivated to combine the teachings of HJ Zottel in the form of a top-mounted drawer in a widely recognized manner. *Id.*

B. Ground 2: The Asserted Claims Unpatentable Under §103 as Obvious Over Clarke in View of Lindahl and in Further View of HJ Zottel

The Asserted Claims are unpatentable because each of their elements is obvious over Clarke in view of Lindahl and in further view of HJ Zottel. A POSITA would have been prompted by these three references to combine their elements in the same manner as the Asserted Claims. *See generally* Ex. 1008.

Exhibit 1008 to the Macdonald Declaration sets forth in detail, element by element, why each Claim of the '926 Patent is obvious over Clarke in view of Lindahl and in further view of HJ Zottel as indicated below:

- **Independent Claim 1:** Ex. 1008, pp. 2–28;
- **Dependent Claims 2-10, 12, 14-16:** Ex. 1008, pp. 29–67;
- **Independent Claim 18:** Ex. 1008, pp. 67-70.

A POSITA would be motivated to combine Clarke, Lindahl, and HJ Zottel in accordance with the teachings therein. Ex. 1008, p. 1. For example, Clarke and Lindahl are both vertically adjustable platforms that use a scissor linkage and a cylindrical actuator. *See* Ex. 1014, Clarke; Ex. 1011, Lindahl. Even though Clarke affords a greater vertical adjustability due to the ability to lower to a point where the pivot points are aligned, it is still highly compatible with Lindahl. Ex. 1008, p. 1. Accordingly, a POSITA would recognize that combining Clarke with Lindahl would allow for greater height adjustability while allowing for the compactness of Lindahl. *Id.* When combined, the gas spring of Lindahl will also be aligned with the links in the same manner as described in Clarke which leads to maximum compactness for storage. *Id.* A POSITA would further be motivated to combine the locking gas spring of Lindahl with the Clarke linkage to create a scissor lift platform that is simpler in its construction and more suitable for lighter duty loading applications. *Id.*

Clarke uses one or more fluid power cylinders to actuate. Ex. 1014, Clarke. Fluid power cylinders require hoses, valves, control systems, and pumps to operate. Conversely, the locking gas spring of Lindahl has a self-contained pressure source and thus obviates the need for such additional complexity. A POSITA would easily recognize that a self-contained pressure source is a more desirable option especially while adapting the Clarke arrangement to a lighter duty load application such as that described by Lindahl. Ex. 1008, p. 1.

Further, a POSITA would also be motivated to combine HJ Zottel with the combination of Clarke in view of Lindahl. As discussed in Ground 1, HJ Zottel

discloses a desktop with drawers underneath. Ex. 1013, HJ Zottel. A desktop with drawers underneath is a widely recognized design that any POSITA would understand could be integrated with a scissor lift platform. Ex. 1008, p. 1. A POSITA would also understand that the depth of the drawers would, at most, be the width of the scissor links so that the drawers do not prevent the assembly from being fully lowered. *Id.* at p. 1-2. HJ Zottel is just one of many examples of how having drawers integrated with a desk is such a widely recognized design element. *Id.* Accordingly, the Asserted Claims are obvious.

C. Ground 3: The Asserted Claims are Unpatentable Under §103 as Obvious Over Huang in View of Clarke and in Further View of HJ Zottel

The Asserted Claims are unpatentable because each of their elements is obvious over Huang in view of Clarke and in further view of HJ Zottel. A POSITA would have been prompted by these three references to combine their elements in the same manner as the Asserted Claims. *See generally* Ex. 1009.

Exhibit 1009 to the Macdonald Declaration sets forth in detail, element by element, why each Claim of the '926 Patent is obvious over Huang in view of Clarke and in further view of HJ Zottel as indicated below:

- **Independent Claim 1:** Ex. 1009, pp. 2-28;
- **Dependent Claims 2-10, 12, 14-16:** Ex. 1009, pp. 28-67;
- **Independent Claim 18:** Ex. 1009, pp. 68-70.

A POSITA would be motivated to combine Huang, Clarke, and HJ Zottel in accordance with the teachings therein. Ex. 1009, p. 1. For example, Huang and

Clarke are both vertically adjustable platforms that use a scissor linkage and cylindrical actuator. Accordingly, they are highly compatible with each other and are also both completely collapsible to the point where the links and the actuators are aligned side-by-side. Huang is able to collapse to a point where even the pivot locations of the actuator are in alignment. The ability to collapse to a point where the pivot locations of an actuator are aligned is an important design consideration that is widely recognized for collapsible tables. *Id.*

Additionally, a POSITA would be motivated to combine the base of Clarke with the Huang mechanism to gain ordinary and widely recognized advantages. *Id.* For example, using the apparatus in Huang on a delicate surface would cause its small rollers to create concentrated pressure points. Indeed, the rolling action of the legs of Huang would cause increased wear and tear on the delicate surface over time. *Id.* at pp. 1-2. A POSITA would easily recognize the threat of potential damage and be motivated to incorporate the base as described by Clarke (which presents a broad base surface). *Id.* at 2. The base surface described by Clarke more evenly distributes the pressure and does not have any small rolling wheels or similar mechanism that would cause relative motion. *Id.* A POSITA would also recognize that the rolling contact of the Huang mechanism legs would present the same wear and tear problem as an office chair on carpet. *Id.* Accordingly, a POSITA would be motivated to incorporate a base (such as the one disclosed by Clarke) to help distribute these loads and prevent the table from damaging the surface it is placed on. *Id.* When combined, the Huang mechanism would gain the aforementioned advantages of the Clarke base.

Further, a POSITA would be motivated to combine HJ Zottel with the teachings of Huang in view of Clarke to use the convenience of a top-mount drawer. *Id.* A bottom mounted drawer slide will not be suitable in such an arrangement because there is no structure below to support the drawer. *Id.* Further, a side mounted drawer would only be feasible if a top-mounted bracket providing structure to support the drawer is installed (which would be functionally equivalent to a top-mounted drawer). *Id.* Accordingly, a POSITA would be motivated to combine the teachings of HJ Zottel in the form of a top-mounted drawer in a widely recognized manner. *Id.* Accordingly, the Asserted Claims are obvious.

D. Ground 4: The Asserted Claims are Unpatentable Under §103 as Obvious Over Yamamoto in View of Zhang and in Further View of HJ Zottel

The Asserted Claims are unpatentable because each of their elements is obvious over Yamamoto in view of Zhang and in further view of HJ Zottel. A POSITA would have been prompted by these three references to combine their elements in the same manner as the Asserted Claims. *See generally* Ex. 1010.

Exhibit 1010 to the Macdonald Declaration sets forth in detail, element by element, why each Claim of the '926 Patent is obvious over Yamamoto in view of Zhang and in further view of HJ Zottel as indicated below:

- **Independent Claim 1:** Ex. 1010, pp. 3-24;
- **Dependent Claims 2-10, 12, 14-16:** Ex. 1010, pp. 25-60;
- **Independent Claim 18:** Ex. 1010, pp. 60-63.

A POSITA would be motivated to combine Yamamoto, Zhang, and HJ

Zottel. Ex. 1010, p. 1. Yamamoto and Zhang are both vertically adjustable platforms that use a scissor linkage and cylindrical actuator. Accordingly, they are highly compatible with each other even though Yamamoto shows greater vertical adjustability due to the ability to lower to a position where the pivot points are aligned. Combining Yamamoto with Zhang also allows for greater height adjustability while allowing the apparatus described in Zhang to store more compactly. *Id.* When combined, the gas springs of Zhang will also be aligned with the links in the same way as is described in Yamamoto thereby leading to maximum compactness. *Id.*

Additionally, a POSITA would be motivated to combine the base of Yamamoto with Zhang to gain widely recognized advantages. *Id.* at p. 2. For example, if Zhang was used on a delicate surface, its legs would cause concentrated pressure points which would cause unrecoverable depression marks in a delicate surface (such as carpet) over time. *Id.* A POSITA will recognize this fact and be motivated to incorporate the base as taught by the broad space surface of Yamamoto. *Id.* A broad base surface more evenly distributes the pressure and significantly reduces the potential damage to the supporting floor. *Id.* A POSITA would recognize that the legs of Zhang would present the same threat of damage as any other piece of furniture on carpet. *Id.* Therefore, a POSITA would be motivated to incorporate a base (such as the one described by Yamamoto) to help distribute these loads and prevent the table from damaging the surface it is placed on. *Id.*

Further, a POSITA would be motivated to combine the teachings of Yamamoto in view of Zhang in a way that allows for the actuator to be connected directly to the scissor pivot arms (as described in Yamamoto). *Id.* Combining Yamamoto in view of Zhang allows the linkage to fully collapse flat making for maximum compactness, which is what Yamamoto describes.³⁶ When combining the teachings of a pair of locking gas springs (as taught by Zhang) with the teachings of Yamamoto, a POSITA would be motivated to connect the opposite side of the gas spring to the platform. *Id.* Notably, when swapping the hydraulic cylinder of Yamamoto for the locking gas spring of Zhang, a POSITA would find it more advantageous to attach the rod end of the locking gas spring to the platform because the rod end of a locking gas spring typically has a lever that can be operated to unlock or lock the locking gas spring. *Id.* Such a connection is an equivalent permutation of the teachings of Yamamoto that will still allow the linkage to fully collapse (in accordance with Yamamoto) but will also allow the lock lever of the gas spring to be more easily accessible by a user. *Id.*

Finally, A POSITA would be further motivated to combine the desktop with accompanying drawers of HJ Zottel with the combination of Yamamoto in view of Zhang. A desktop with the accompanying drawers is a widely known design element that any POSITA would understand could be integrated with a scissor lift platform. *Id.* at p. 3. A POSITA would understand that the depth of the drawers would, at most, be the width of the scissor links so that the drawers do not prevent the assembly from being fully lowered. *Id.* HJ Zottel is just one of many examples

³⁶ Ex. 1012, Yamamoto 1:53-64

of this widely recognized design element of having drawers integrated with a desk. *Id.* Further, when combining the teachings of HJ Zottel with the combination of Yamamoto in view of Zhang, a POSITA would be motivated to use a top-mount drawer because the top-mount drawer is the most convenient mount for the previously described desk style. *Id.* A bottom mounted drawer slide is not suitable because there is no structure below to support the drawer. *Id.* Further, a side mounted drawer is only feasible by installing a top-mounted bracket to provide structure to support the drawer (which is functionally equivalent to a top-mounted drawer). *Id.* Accordingly, a POSITA will be motivated to combine the teachings of HJ Zottel in the form of a top-mounted drawer. *Id.* Therefore, the Asserted Claims are obvious

X. CONCLUSION

For the reasons above, Petitioner requests institution of Inter Partes Review of the Asserted Claims and cancellation of the '926 Patent.

Dated: January 17, 2025

Respectfully Submitted,

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CERTIFICATE OF COMPLIANCE

I hereby certify that this petition complies with the type-volume limitations of 37 C.F.R. §42.24 because it contains 13803 words (as determined by the Microsoft Word word-processing system used to prepare the petition), excluding the parts of the petition exempted by 37 C.F.R. §42.24.

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CERTIFICATE OF SERVICE

The undersigned certifies pursuant to 37 C.F.R. §§ 42.6 that on January 17, 2025, a true and correct copy of the foregoing Petition For *Inter Partes* Review of U.S. Patent No. 11,910,926, including all Exhibits, was served via electronic mail on the Patent Owner at the following correspondence address of record as listed in the USPTO electronic filing system:

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and was served via electronic mail upon counsel of record for the Patent Owner in the litigation in the U.S. District Court for the Central District of California:

EP Family Corp. v. Office Kick, Inc.

Case No. 2:24-cv-00667

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