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Document hanger

Abstract

The document hanger has a frame, one or more hanger lines, and a plurality of clips. The document hanger may be configured to display plurality of items simultaneously. As non-limiting examples, the plurality of items may be documents, reports, art projects, photographs, student works, certificates, other light-weight articles, or any combination thereof. As further non-limiting examples, the document hanger may be installed on a wall, on a bulletin board, over windows, or from a ceiling in a classroom, real estate office, business, event venue, or home. The one or more hanger lines may be stretched horizontally between a pair of vertical frame supports. The plurality of clips may be configured to couple individual items selected from the plurality of items to the one or more hanger lines. In some embodiments, the width and/or height of the frame may be adjustable.

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References Cited

U.S.	PAT	ΓΕΝΤ	DOC	CUME	ENTS
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U.S. PATENT D	OCUMENTS			
Patent No.	Issued Date	Patentee Name	U.S. Cl.	CPC
358193	12/1886	Gause	211/85.2	B60R 1/12
452728	12/1890	Parkinson	346/146	G09F 3/00
918196	12/1908	Price	211/45	A47F 7/163
933500	12/1908	Towle	24/546	G09F 7/22
1393136	12/1920	Johnson	40/531	G08B 5/02
1857617	12/1931	Berdon	211/119.011	D06F 57/08
1980587	12/1933	Hayes	276/1	G03F 1/90
2068028	12/1936	Jernson	211/104	D06F 57/12
2230037	12/1940	Hoeflich	211/99	D06F 57/12
2270796	12/1941	Hauser	211/35	A47G 25/08
2428073	12/1946	Handel	248/224.7	A47J 47/16
2468891	12/1948	Neiser	211/104	D06F 57/12
2675130	12/1953	Dore	211/118	A47G 25/18
2848118	12/1957	Gibson	211/196	D06F 57/125
2925916	12/1959	Pollock	211/119.004	A47B 61/02
3079004	12/1962	Scott	211/119.009	D06F 57/12
3146890	12/1963	Cowper	211/119.1	D06F 57/12
3178033	12/1964	Wirsing	D6/326	A47K 10/14
3339745	12/1966	Sugerman	211/85.2	A47F 7/02
3782558	12/1973	Schael, Jr.	211/13.1	A47F 5/08
4029318	12/1976	Boss	108/118	F41J 1/10
4162730	12/1978	Steere, Jr.	211/118	D06F 57/12
4463855	12/1983	Smithers	248/323	E06B 7/28
4494661	12/1984	Krusche	248/220.31	A47F 5/083
4872963	12/1988	Van Horn	118/503	C25D 17/08
5253750	12/1992	Keffer	211/85.2	A47F 7/02
5356061	12/1993	Yu	297/188.2	B60R 7/043
5398824	12/1994	Wolff	211/88.04	A47F 5/0807
5485932	12/1995	Romm	248/214	H02G 3/28
5503299	12/1995	Wentworth	N/A	N/A
5551772	12/1995	Keffer	211/85.2	A47F 7/02
5588543	12/1995	Finger	211/90.01	A47F 5/083
5645178	12/1996	Conley, Jr.	248/490	A47G 25/746
5967342	12/1998	Steffine	211/85.15	D06F 81/00
6098815	12/1999	Nesser	211/38	A47B 61/04
6299001	12/2000	Frolov	248/220.21	A47F 5/08
6375018	12/2001	Clement	211/85.2	A47F 7/02
6533132	12/2002	Weisenburger	248/340	F16B 12/34
7000787	12/2005	Felsenthal	N/A	N/A

7059073	12/2005	Beach	211/113	G09F 1/10
7150361	12/2005	Calleja	211/49.1	A47F 7/0021
D566767	12/2007	Urdarevik	N/A	N/A
7757870	12/2009	Lin	211/118	C25D 17/08
7931161	12/2010	Newbould	211/181.1	A47B 55/02
8006453	12/2010	Anderson	52/39	G09F 7/18
D667246	12/2011	Cittadino	D6/513	N/A
8627950	12/2013	Bland	211/85.2	A45C 11/16
8657124	12/2013	Brown	211/85.3	A47G 25/005
8714367	12/2013	Schulman	211/11	B43K 23/002
9060622	12/2014	Neumann et al.	N/A	N/A
9517655	12/2015	Manach	N/A	A47G 1/065
9765470	12/2016	Dufresne	N/A	N/A
9918551	12/2017	Hilliard	N/A	F16B 2/26
9955782	12/2017	Rue et al.	N/A	N/A
10094064	12/2017	Champagne et al.	N/A	N/A
10334973	12/2018	Slevin-Giesler	N/A	A47B 43/006
10421184	12/2018	Kwak	N/A	B25H 3/04
10779668	12/2019	Erickson	N/A	A47G 25/746
11071398	12/2020	Hicks et al.	N/A	N/A
11337531	12/2021	Zhang et al.	N/A	N/A
11877653	12/2023	Ardehali	N/A	A47B 96/061
2003/0164347	12/2002	Bouvier, Jr.	211/187	B63B 32/83
2006/0186071	12/2005	Rowan	211/113	A47G 29/00
2006/0207952	12/2005	Timmons	211/195	A47F 5/0892
2007/0193969	12/2006	Albanese	211/85.2	A47F 7/02
2007/0284326	12/2006	Baloun	211/182	B65D 57/00
2008/0217272	12/2007	Lam	211/118	A47G 25/743
2009/0200252	12/2008	Blitz	211/85.3	A47F 7/19
2012/0267331	12/2011	Cittadino	211/183	A47F 5/10
2013/0220957	12/2012	Malik	211/119.004	A47B 96/16
2015/0282614	12/2014	Wyner	211/85.3	A47B 61/003

OTHER PUBLICATIONS

New Classroom. Product Description [online]. Whitney Ward, Pinterest.com [retrieved on Feb. 3, 2023]. Retrieved from the Internet: <URL: https://www.pinterest.com/pin/161566705361208491/>. cited by applicant

Classroom Art Display. Product Description [online]. David Santos, Pinterest.com [retrieved on Feb. 3, 2023]. Retrieved from the Internet: <URL:

https://www.pinterest.com/pin/553239135448990248/>. cited by applicant

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Background/Summary

RELATED APPLICATIONS

(1) None.

FIELD OF THE DEVICE

(2) The present device pertains to a document hanger and more specifically to a document hanger having adjustable features.

BACKGROUND OF THE DEVICE

- (3) There are many business, educational, and recreational settings where a wide range of lightweight materials need to be shown. Papers, photos, works of art, and many other things can be among these. Think about a teacher who wants to show off student work, a designer who wants to show a client a possible design idea, or an agent who is looking at evidence in a crime case. These are just a few examples, but they all have one thing in common: they all need to show things clearly so that they can be studied, appreciated, or talked about in more depth.
- (4) Using adhesives like tape has been the most popular way to deal with this problem in the past. These are stuck to vertical surfaces like windows, walls, whiteboards, and whiteboards to make them into temporary exhibition areas. There are some problems with this method, though.
- (5) To begin, it's hard on the body. Imagine having to climb up and down chairs and stools over and over again to get that picture or piece of paper to stick just right where everyone can see it. Putting things on display this way can be dangerous and time-consuming, especially if there are a lot of things to show.
- (6) Next, tapes are known for leaving behind leftovers. If you take down the tape, you might be left with a sticky, ugly mess, depending on the type of tape you used and the surface it was stuck to. Over time, this can lower the quality of the surfaces, which can hurt their look and function.
- (7) There is also the problem that this method is very rigid. This method doesn't give you a lot of freedom in changing environments where the way things are arranged might need to be changed all the time. Moving things around that are taped together is not only time-consuming, but it could also damage the items.
- (8) Moving from one place to another adds another barrier. It takes a long time to take down and reset up the display every time someone moves, like a teacher to a different classroom or a businessperson to a different meeting room. And in the world we live in now, every minute is important. In order to deal with these problems, a better solution is needed. The development of the document hanger addresses this need in a manner that is safe, efficient, and cost effective. SUMMARY OF THE DEVICE
- (9) The described invention pertains to a document hanger device designed primarily for displaying various items. The central embodiment features a vertically-oriented rectangular frame with an open center. This frame is notable for its adjustable vertical and horizontal supports. Stretched horizontally between these vertical supports are one or more hanger lines, designed for holding items via a series of clips. These hanger lines can be positioned and repositioned thanks to a range of wire couplers present on the vertical supports. A key functional feature includes detachable mounting hooks, which enable the device to be hung on either walls or ceilings.
- (10) Several embodiments emerge from this central design. The items to be displayed can encompass a range of lightweight materials, such as documents, art projects, photos, student assignments, certificates, among others. The device has versatility in its placement, being apt for environments like classrooms, homes, businesses, real estate offices, and event venues. In terms of its structure, the vertical supports of the frame can telescope and are equipped with height adjusters for easy modification of the frame's height. Similarly, the horizontal supports are designed to adjust in width.
- (11) Certain wire couplers on the device can be left unused, offering flexibility in positioning the hanger lines. If there's a need to adjust the width of the frame, the hanger lines can be replaced, cut, or even lengthened to accommodate. A particularly convenient feature is the ability to add or

remove items from the hanger lines without needing to take down the entire device, or by simply adjusting the position of the frame. It can function as a single-sided display or a double-sided one, making it suitable as a room divider. Depending on manufacturing choices and requirements, the device's specifications, materials, and usage methods can vary. A notable material choice for the hanger lines includes durable options like wire, nylon, or polyethylene.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

- (1) The advantages and features of the present device will become better understood with reference to the following more detailed description and claims taken in conjunction with the accompanying drawings, in which like elements are identified with like symbols, and in which:
- (2) FIG. **1** is a front view of a document hanger **100**, according to an embodiment of the present device, illustrating the frame **200**;
- (3) FIG. **2** is a detail view of a document hanger **100**, according to an embodiment of the present device, illustrating one (1) or more hanger lines **240** and one (1) of a plurality of mounting hooks **254**;
- (4) FIG. **3** is a detail view of a document hanger **100**, according to an embodiment of the present device, illustrating the left side frame support **202** and a vertical frame support height adjuster **208**;
- (5) FIG. **4** is a detail view of a document hanger **100**, according to an embodiment of the present device, illustrating the top frame support **222** and a horizontal frame support width adjuster **228**;
- (6) FIG. **5** is an in-use view of a document hanger **100**, according to an embodiment of the present device;
- (7) FIG. **6** is an alternate in-use view of a document hanger **100**, according to an embodiment of the present device.

DESCRIPTIVE KEY

(8) **100** document hanger **200** frame **202** left frame support **204** right frame support **206** plurality of wire couplers **208** vertical frame support height adjuster **222** top frame support **224** bottom frame support **228** horizontal frame support width adjuster **240** hanger line **250** clip **254** mounting hook **900** item **920** wall **922** window **930** ceiling

DESCRIPTION OF THE DEVICE

- (9) The present device is directed to a document hanger (herein described as the "device") **100**. The device **100** may comprise a frame **200**, one (1) or more hanger lines **240**, and a plurality of clips **250**. The device **100** may be configured to display plurality of items **900** simultaneously. As nonlimiting examples, the plurality of items **900** may be documents, reports, art projects, photographs, student works, certificates, other light-weight articles, or any combination thereof. As further nonlimiting examples, the device 100 may be installed on a wall 920, on a bulletin board, over windows 922, or from a ceiling 930 in a classroom, real estate office, business, event venue, or home using any suitable fastener such as a plurality of hooks (not shown). The hanger lines 240 may be stretched horizontally between a pair of vertical frame supports. The plurality of clips **250** may be configured to couple individual items selected from the plurality of items **900** to the hanger lines **240**. In some embodiments, the width and/or height of the frame **200** may be adjustable. (10) The frame **200** may form a vertically-oriented rectangle with an open center. The hanger lines **240** may be stretched between opposing lateral sides of the frame **200**. The frame **200** may retain the hanger lines **240** in predetermined positions. The frame **200** may determine the spacing between the hanger lines **240**. The frame **200** may establish the overall dimensions of the device **100** and therefore may determine the capacity of the device **100**.
- (11) The frame **200** may comprise a pair of vertical frame supports and a pair of horizontal frame supports. The pair of vertical frame supports may be vertically-oriented armatures comprising the

lateral sides of the frame **200**. The pair of vertical frame supports may comprise a left frame support **202** located on the left side of the frame **200** and a right frame support **204** located on the right side of the frame **200**. The left frame support **202** may be oriented to be parallel to the right frame support **204**.

- (12) An individual vertical frame support selected from the pair of vertical frame supports may comprise a plurality of wire couplers **206** where the hanger lines **240** couple to or pass through the frame **200**. As non-limiting examples, the plurality of wire couplers **206** may comprise anchors, rivets, grommets, apertures, crimp sleeves, hooks, fittings, or any combination thereof.
- (13) In general, an individual wire coupler on the left frame support **202** may be paired with a corresponding individual wire coupler on the right frame support **204** and the hanger lines **240** may be stretched horizontally between the individual wire couplers on the left frame support **202** and the corresponding individual wire couplers on the right frame support **204**.
- (14) In some embodiments, one (1) or more of the plurality of wire couplers **206** may be left unpopulated such that the hanger lines **240** may be repositionable. In this context, unpopulated may refer to the fact that the hanger lines **240** do not pass through an unpopulated wire coupler.
- (15) In some embodiments, the individual vertical frame support may be adjustable such that the height of the frame **200** may be changed. As a non-limiting example, the individual vertical frame support may be divided into two (2) or more telescoping vertical segments joined by vertical frame support height adjusters **208** may be loosened to permit individual vertical segments of the individual vertical frame support to slide in a manner that lengthens or shortens the individual vertical frame support. The vertical frame support height adjusters **208** may then be tightened to retain an established height for the frame **200**.
- (16) The pair of horizontal frame supports may be horizontally-oriented armatures. The pair of horizontal frame supports may comprise a top frame support 222 located on the top of the frame 200 and a bottom frame support 224 located at the bottom of the frame 200. The top frame support 222 may be oriented to be parallel to the bottom frame support 224. The top frame support 222 and the bottom frame support 224 may be oriented to be perpendicular to the left frame support 202 and the right frame support 204.
- (17) In some embodiments, an individual horizontal frame support selected from the top frame support **222** and the bottom frame support **224** may be adjustable such that the width of the frame **200** may be changed. As a non-limiting example, the individual horizontal frame support may be divided into two (2) or more telescoping horizontal segments joined by horizontal frame support width adjusters **228**. The horizontal frame support width adjusters **228** may be loosened to permit individual horizontal segments of the individual vertical frame support to slide in a manner that lengthens or shortens the individual horizontal frame support. The horizontal frame support width adjusters **228** may then be tightened to retain an established width for the frame **200**.
- (18) As non-limiting examples, the hanger lines **240** may be made of wire or a monofilament polymer such as nylon or polyethylene. In some embodiments, the hanger lines **240** may be coupled between the left frame support **202** and the right frame support **204** at each height on the frame **200** where the hanger lines **240** appear and the hanger lines at each height may be independent of all other hanger lines. Alternatively, a single hanger line may be threaded back and forth through the frame **200** such that the single hanger line appears at each height in the frame **200** where the hanger lines **240** appear.
- (19) As non-limiting examples, the hanger lines **240** may be replaced, cut, lengthened from a surplus length coupled to the frame **200**, or any combination thereof when necessitated due to changing the width of the frame **200**. A plurality of mounting hooks **254** may detachably couple to the frame **200** to suspend the frame **200** from the wall **920** or the ceiling **930** for viewing. (20) The plurality of clips **250** may be configured to detachably couple the plurality of items **900** to the hanger lines **240**. The plurality of items **900** may be displayed on the front side of the device **100**, on the rear side of the device **100**, or both. The plurality of items **900** may be coupled to the

device 100 and decoupled from the device 100 while the device 100 is suspended from the plurality of mounting hooks 254. Alternatively, the frame 200 may be lowered to change the plurality of items 900 by decoupling the frame 200 from the plurality of mounting hooks 254. As a non-limiting example, the frame 200 may be lowered using one (1) or more reaching tools that comprise an extension pole with a forked end to lower the frame 200 from the plurality of mounting hooks 254 and to lift the frame 200 onto the plurality of mounting hooks 254. (21) In use, the plurality of mounting hooks 254 may be coupled to a wall 920 or to a ceiling and the frame 200 may be detachably coupled to the plurality of mounting hooks 254. Plurality of items 900 may be detachably coupled to the hanger lines 240 such that the plurality of items 900 are displayed for viewing. The plurality of items 900 may be display on a single side of the frame 200 or on both sides of the frame 200. As a non-limiting example, the frame 200 may be suspended from the ceiling to form a room divider and the plurality of items 900 may be coupled to both sides of the frame 200.

(22) In some embodiments, the height and/or width of the frame 200 may be changed by loosening the vertical frame support height adjusters 208, the horizontal frame support width adjusters 228, or both and telescoping the individual vertical frame supports and/or the individual horizontal frame supports to lengthen and/or shorten side of the frame **200**. In some embodiments, resizing the frame **200** may necessitate changing the length of the hanger lines **240**. As non-limiting examples, the hanger lines **240** may be replaced, cut, lengthened from a surplus length coupled to the frame **200**, or any combination thereof when necessitated due to changing the width of the frame 200. (23) Referring now to FIGS. **5** and **6**, the plurality of items **900** may be added and/or removed from the hanger lines **240** while the frame **200** is suspended from the wall **920** or the ceiling **930**. Alternatively, the frame **200** may be lowered and replaced using one (1) or more reaching tools. (24) The exact specifications, materials used, and method of use of the device **100** may vary upon manufacturing. The foregoing descriptions of specific embodiments of the present device have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the device to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the device and its practical application, to thereby enable others skilled in the art to best utilize the device and various embodiments with various modifications as are suited to the particular use contemplated.

Claims

1. A document hanger device consisting of: a vertically-oriented rectangular frame having an open center and consisting of a pair of vertical frame supports and a pair of horizontal frame supports; a plurality of wire couplers positioned along at least one of the vertical frame supports; a plurality of hanger lines extending horizontally between corresponding wire couplers on the vertical frame supports; a plurality of clips coupled to the hanger lines and configured to detachably secure one or more display items to the hanger lines; and, a plurality of detachable mounting hooks configured to suspend the frame from a wall or ceiling; and, wherein the pair of vertical frame supports are parallel to each other and oriented perpendicular to the pair of horizontal frame supports; wherein the frame is detachable from the mounting hooks to allow for repositioning or replacement of the display items; wherein at least one of the vertical frame supports and at least one of the horizontal frame supports consist of telescoping segments joined by frame adjusters configured to allow selective adjustment of a height and a width of the frame; wherein the hanger lines are repositionable by selectively coupling to different wire couplers, and one or more of the wire couplers are left unpopulated when the hanger lines are not coupled thereto; wherein each of the hanger lines is made of wire or monofilament polymer; and, wherein the display items are