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## Patent Public Search | Text View

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United States Patent	12385594
Kind Code	B1
Date of Patent	August 12, 2025
Inventor(s)	Agalgaonkar; Sudeep Balkrishna et al.

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### Stand system for portable electronic device

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#### Abstract

A device stand system for a portable electronic tablet device includes (I) a device holder assembly couplable with the portable electronic tablet device; (II) a stand assembly coupled to the device holder assembly; and (III) an electrical connector assembly including an electrical connector plug assembly with an electrical connector plug couplable with the electrical connector port of the portable electronic tablet device, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly. Other aspects are described in the claims, drawings, and text forming a part of the present disclosure.

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**Inventors:** Agalgaonkar; Sudeep Balkrishna (Jamestown, NC), Lynch; Riley Edvin (Greensboro, NC)

**Applicant:** Pioneer Square Brands, Inc. (High Point, NC)

**Family ID:** 1000008520389

**Assignee:** Pioneer Square Brands, Inc. (High Point, NC)

**Appl. No.:** 19/074962

**Filed:** March 10, 2025

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#### Publication Classification

**Int. Cl.:** F16M11/04 (20060101); F16M11/10 (20060101); F16M11/20 (20060101); G06F1/16 (20060101)

**U.S. Cl.:**

**CPC** F16M11/041 (20130101); F16M11/10 (20130101); F16M11/2014 (20130101); F16M11/2021 (20130101); G06F1/1607 (20130101);

#### Field of Classification Search

## References Cited

### U.S. PATENT DOCUMENTS

Patent No.	Issued Date	Patentee Name	U.S. Cl.	CPC
7166987	12/2006	Lee	206/703	A45F 5/021
8113873	12/2011	Sarraf	439/533	H01R 13/6315
8986029	12/2014	Webb	439/248	H05K 7/14
9742107	12/2016	Choi	N/A	H01R 13/6315
10554002	12/2019	Okazaki	N/A	H02J 7/0044
10700483	12/2019	Piper	N/A	G06F 1/1632
10770853	12/2019	Piper	N/A	H01R 31/06
11669128	12/2022	Troedson	361/679.41	G06F 1/1632
11855397	12/2022	Lynch	N/A	H01R 33/94
12078286	12/2023	Agalgaonkar	N/A	G06F 1/1607
12092258	12/2023	Agalgaonkar	N/A	F16M 11/10
12119691	12/2023	Lynch	N/A	H02J 7/0013
2013/0217448	12/2012	Kim	455/575.1	H04M 1/0254
2014/0118923	12/2013	Stanley	361/679.41	H04M 1/04
2015/0036283	12/2014	Suckle	361/679.41	G06F 1/1632
2020/0201388	12/2019	Spyrison	N/A	F16M 11/10
2021/0072792	12/2020	DeCamp	N/A	G06F 13/4022

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*Primary Examiner:* Duckworth; Bradley

*Attorney, Agent or Firm:* Grandview Law

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## Background/Summary

### SUMMARY

- (1) In one or more aspects a device stand system for a portable electronic tablet device having an electrical connector portion, includes (I) a device holder assembly couplable with the portable electronic tablet device; (II) a stand assembly coupled to the device holder assembly; and (III) an electrical connector assembly including an electrical connector plug assembly with an electrical connector plug couplable with the electrical connector port of the portable electronic tablet device, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly.
- (2) In implementations the device holder assembly includes a first side wall portion, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly to pivot about a first axis, and wherein the first axis is positioned parallel with the first side wall portion of the device holder assembly.
- (3) In implementations the electrical connector plug assembly is pivotally coupled to the device holder assembly to include a first pivotal position, and wherein when electrical connector plug assembly is in the first pivotal position, the electrical connector plug extends perpendicularly with respect to the first side wall portion of the device holder assembly.
- (4) In implementations the electrical connector plug assembly is pivotally coupled to the device holder assembly to include a second pivotal position, and wherein when the electrical connector

plug assembly is in the second pivotal position, the electrical connector plug extends at an angle less than ninety degrees with respect to the first side wall portion of the device holder assembly.

(5) In implementations the device holder assembly includes at least one base portion extending perpendicularly with respect to the first side wall portion, wherein the electrical connector plug includes an end portion, and wherein when the electrical connector plug assembly is in the first pivotal position, the end portion of the electrical connector plug is closer to the at least one base portion than when the electrical connector plug assembly is in the second pivotal position.

(6) In implementations the electrical connector plug assembly includes a body member, wherein the body member includes a first side portion, a second side portion, a first pivot pin member, and a second pivot pin member, wherein the first pivot pin member extends from the first side portion in a first direction, wherein the second pivot pin member extends from the second side portion in a second direction, and wherein the first direction is opposite of the second direction.

(7) In implementations the first pivot pin member and the second pivot pin member are pivotally coupled with the device holder assembly.

(8) In implementations the device holder assembly includes a first support post member and a second support post member, wherein the first pivot pin member is pivotally coupled to the first support post member, and wherein the second pivot pin member is pivotally coupled to the second support post member.

(9) In implementations the first support post member includes a first notch, wherein the first pivot pin member is pivotally coupled to the first notch, wherein the second support post member includes a second notch, and wherein the second pivot pin member is pivotally coupled to the second notch.

(10) In implementations the device holder assembly includes a base portion and a first side wall portion perpendicularly extending with respect to the base portion, and wherein the first support post member and the second support post member are coupled with the base portion and perpendicularly extend with respect to the base portion.

(11) In implementations the electrical connector assembly includes an electrical cable assembly electrically coupled with the connector plug assembly, and wherein the electrical connector assembly includes an electrical connector port assembly electrically coupled with the electrical cable assembly.

(12) In implementations the electrical connector plug includes electrical power connection capability with the electrical connector port of the portable electronic device.

(13) In implementations the electrical connector plug includes data connection capability with the electrical connector port of the portable electronic device.

(14) In implementations the electrical connector plug is of a universal serial bus type.

(15) In one or more aspects a device stand system for a portable electronic tablet device having an electrical connector port includes (I) a device holder assembly couplable with the portable electronic tablet device; and (II) an electrical connector assembly including an electrical connector plug assembly with an electrical connector plug couplable with the electrical connector port of the portable electronic tablet device, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly.

(16) In implementations the device holder assembly includes a first side wall portion, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly to pivot about a first axis, wherein the first axis is positioned parallel with the first side wall portion of the device holder assembly, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly to include a first pivotal position, wherein when electrical connector plug assembly is in the first pivotal position, the electrical connector plug extends perpendicularly with respect to the first side wall portion of the device holder assembly, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly to include a second pivotal position, and wherein when the electrical connector plug assembly is in the second pivotal position,

the electrical connector plug extends at an angle less than ninety degrees with respect to the first side wall portion of the device holder assembly.

(17) In implementations the device holder assembly includes a first side wall portion, wherein the electrical connector plug assembly is pivotably coupled to the device holder assembly to pivot about a first axis, wherein the first axis is positioned parallel with the first side wall portion of the device holder assembly, wherein the device holder assembly includes at least one base portion extending perpendicularly with respect to the first side wall portion, wherein the electrical connector plug includes an end portion, and wherein when the electrical connector plug assembly is in the first pivotal position, the end portion of the electrical connector plug is closer to the at least one base portion than when the electrical connector plug assembly is in the second pivotal position.

(18) In one or more aspects a device stand system for a portable electronic tablet device having an electrical connector port includes (I) a stand assembly couplable with the portable electric tablet device; and (II) an electrical connector assembly including an electrical connector plug assembly with an electrical connector plug couplable with the electrical connector port of the portable electronic tablet device, wherein the electrical connector plug assembly is pivotally coupled to the stand assembly.

(19) In implementations the electrical connector plug assembly includes a body member, wherein the body member includes a first side portion, a second side portion, a first pivot pin member, and a second pivot pin member, wherein the first pivot pin member extends from the first side portion in a first direction, wherein the second pivot pin member extends from the second side portion in a second direction, wherein the first direction is opposite of the second direction, and wherein the first pivot pin member and the second pivot pin member are pivotally coupled with the stand assembly.

(20) In implementations the electrical connector plug is of a universal serial bus type.

(21) In addition to the foregoing, other aspects are described in the claims, drawings, and text forming a part of the disclosure set forth herein. Various other aspects are set forth and described in the teachings such as text (e.g., claims and/or detailed description) and/or drawings of the present disclosure. The foregoing is a summary and thus may contain simplifications, generalizations, inclusions, or omissions of detail; consequently, those skilled in the art will appreciate that the summary is illustrative only and is NOT intended to be in any way limiting. Other aspects, features, and advantages of the devices and/or processes and/or other subject matter described herein will become apparent in the teachings set forth herein.

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## Description

### BRIEF DESCRIPTION OF THE FIGURES

(1) For a more complete understanding of implementations, reference now is made to the following descriptions taken in connection with the accompanying drawings. The use of the same symbols in different drawings typically indicates similar or identical items, unless context dictates otherwise.

(2) With reference now to the figures, shown are one or more examples of Stand System for Portable Electronic Device, articles of manufacture, compositions of matter for same that may provide context, for instance, in introducing one or more processes and/or devices described herein.

(3) FIG. 1 is a front perspective view of device stand assembly.

(4) FIG. 2 is a side elevational view of device stand assembly of FIG. 1.

(5) FIG. 3 is a side elevational view of device stand assembly of FIG. 1.

(6) FIG. 4 is an exploded front perspective view of device stand assembly of FIG. 1.

(7) FIG. 5 is a front perspective view of device holder front of device stand assembly of FIG. 1.

(8) FIG. 6 is a front perspective view of plate member of device stand assembly of FIG. 1.

(9) FIG. 7 is an enlarged front perspective view of a portion of plate member of device stand

assembly of FIG. 1.

(10) FIG. 8 is a front perspective view of device holder back of device stand assembly of FIG. 1.

(11) FIG. 9 is a front perspective view of stand upper back of device stand assembly of FIG. 1.

(12) FIG. 10 is an exploded front perspective view of a first version of rotatable assembly of hinge assembly of device stand assembly of FIG. 1.

(13) FIG. 11 is an exploded front perspective view of a second version of rotatable assembly of hinge assembly of device stand assembly of FIG. 1.

(14) FIG. 12 is a front perspective view of cylindrical member of hinge assembly of device stand assembly of FIG. 1.

(15) FIG. 13 is an exploded front perspective view of hinge assembly of device stand assembly of FIG. 1.

(16) FIG. 14 is a front perspective view of hinge assembly of device stand assembly of FIG. 1.

(17) FIG. 15 is a front perspective view of stand upper front of device stand assembly of FIG. 1.

(18) FIG. 16 is a front perspective view of stand lower of device stand assembly of FIG. 1.

(19) FIG. 17 is a front perspective partial view of device stand assembly of FIG. 1.

(20) FIG. 18 is a side elevational partial view of device stand assembly of FIG. 1.

(21) FIG. 19 is a side elevational partial view of device stand assembly of FIG. 1.

(22) FIG. 20 is a rear perspective view of device stand assembly of FIG. 1.

(23) FIG. 21 is an exploded rear perspective view of device stand assembly of FIG. 1.

(24) FIG. 22 is a rear perspective view of device holder front of device stand assembly of FIG. 1.

(25) FIG. 23 is a rear perspective view of plate member of device stand assembly of FIG. 1.

(26) FIG. 24 is a rear perspective view of device holder back of device stand assembly of FIG. 1.

(27) FIG. 25 is a rear perspective view of stand upper back of device stand assembly of FIG. 1.

(28) FIG. 26 is an exploded rear perspective view of a first version of rotatable assembly of hinge assembly of device stand assembly of FIG. 1.

(29) FIG. 27 is an exploded rear perspective view of a second version of rotatable assembly of hinge assembly of device stand assembly of FIG. 1.

(30) FIG. 28 is a rear perspective view of cylindrical member of hinge assembly of device stand assembly of FIG. 1.

(31) FIG. 29 is an exploded rear perspective view of hinge assembly of device stand assembly of FIG. 1.

(32) FIG. 30 is a rear perspective view of hinge assembly of device stand assembly of FIG. 1.

(33) FIG. 31 is a rear perspective view of stand upper front of device stand assembly of FIG. 1.

(34) FIG. 32 is a rear perspective view of stand lower of device stand assembly of FIG. 1.

(35) FIG. 33 is a rear perspective partial view of device stand assembly of FIG. 1.

(36) FIG. 34 is a front perspective partially exploded view of device stand system and portable device.

(37) FIG. 35 is a front perspective partially exploded view of device stand system and portable device.

(38) FIG. 36 is a front perspective partial view of device stand system.

(39) FIG. 37 is a front perspective view of stand assembly with cable assembly.

(40) FIG. 38 is a front perspective view of stand lower member with cable assembly.

(41) FIG. 39 is an exploded front perspective view of stand lower member with cable assembly.

(42) FIG. 40 is an exploded front perspective view of base assembly with cable assembly.

(43) FIG. 41 is a perspective view of cable assembly.

(44) FIG. 42 is a perspective view of cable assembly.

(45) FIG. 43 is a rear perspective exploded view of stand assembly with cable assembly.

(46) FIG. 44 is an exploded rear perspective partial view of stand assembly with hinge assembly and cable assembly.

(47) FIG. 45 is a rear perspective view of stand lower member with cable assembly.

- (48) FIG. **46** is a rear perspective view of stand lower member.
- (49) FIG. **47** is a front perspective view of base assembly with cable assembly.
- (50) FIG. **48** is a top perspective view of base assembly.
- (51) FIG. **49** is a bottom perspective partial view of stand lower member.
- (52) FIG. **50** is a front perspective view of bearing assembly.
- (53) FIG. **51** is a front perspective view of cover plate.
- (54) FIG. **52** is a rear perspective view of cover plate.
- (55) FIG. **53** is a front perspective view of sheet.
- (56) FIG. **54** is a top perspective partial view of base assembly.
- (57) FIG. **55** is a front perspective view of device stand system with portable device shown rotating in mid rotational position.
- (58) FIG. **56** is a rear perspective view of device stand system in second rotational position.
- (59) FIG. **57** is a rear perspective view of device stand system in second rotational position.
- (60) FIG. **58** is a bottom perspective partial view of base assembly of device stand system.
- (61) FIG. **59** is a front perspective of portable electronic device of FIG. **1**.
- (62) FIG. **60** is a front perspective of device stand system of FIG. **1**.
- (63) FIG. **61** is a front perspective of a portion of device stand system of FIG. **1**.
- (64) FIG. **62** is a side perspective of a portion of device stand system of FIG. **1** with connector in neutral position.
- (65) FIG. **63** is a front perspective of a portion of device stand system of FIG. **1** with connector in neutral position.
- (66) FIG. **64** is a side perspective of a portion of device stand system of FIG. **1** with connector in non-neutral position.
- (67) FIG. **65** is a front perspective of a portion of device stand system of FIG. **1** with connector in non-neutral position.
- (68) FIG. **66** is a front perspective of a portion of device stand system with portable electronic device of FIG. **1**.
- (69) FIG. **67** is a front perspective of device stand system with portable electronic device of FIG. **1**.
- (70) FIG. **68** is a front perspective of a portion of device stand system of FIG. **1**.
- (71) FIG. **69** is a front perspective of a portion of device stand system of FIG. **1**.
- (72) FIG. **70** is a front perspective of a portion of device stand system of FIG. **1**.
- (73) FIG. **71** is a front perspective of a portion of device holder back member of FIG. **4**.
- (74) FIG. **72** is a side elevational view of connector assembly of FIG. **35**.
- (75) FIG. **73** is a side elevational view of a portion of connector assembly of FIG. **35**.
- (76) FIG. **74** is a front elevational view of connector assembly of FIG. **35**.
- (77) FIG. **75** is a top plan view of a portion of connector assembly of FIG. **35**.

#### DETAILED DESCRIPTION

(78) In the following detailed description, reference is made to the accompanying drawings, which form a part hereof. In the drawings, similar symbols typically identify similar components, unless context dictates otherwise. The illustrative implementations described in the detailed description, drawings, and claims are not meant to be limiting. Other implementations may be utilized, and other changes may be made, without departing from the spirit or scope of the subject matter presented here.

- (79) Turning to FIG. **1**, depicted therein is a front perspective view of device stand system **10** with portable electronic tablet device **100**. Depicted implementation of device stand system **10** is shown to include device holder assembly **10a** and stand assembly **10b**.
- (80) Turning to FIG. **2**, depicted therein is a side elevational view of device stand system **10**.
- (81) Turning to FIG. **3**, depicted therein is a side elevational view of device stand system **10** showing device holder assembly **10a** being tilted between position **P1** and position **P2**.
- (82) Turning to FIG. **4**, depicted therein is an exploded front perspective view of device stand

system **10**. Depicted implementation of device stand system **10** is shown with device holder assembly **10a** to include frame member **12**, device holder front member **14**, plate member **16**, and device holder back member **18**. Furthermore, depicted implementation of device stand system **10** is shown with stand assembly **10b** to include stand upper back member **20**, stand upper front member **24**, and stand lower member **26**. Furthermore, depicted implementation of device stand system **10** is shown to include hinge assembly **22**.

(83) Turning to FIG. **5**, depicted therein is a front perspective view of device holder front member **14** of device stand system **10**. Depicted implementation of device holder front member **14** is shown to include side wall **14a**, side wall **14b**, side wall **14c**, side wall **14d**, and base **14e** with camera aperture **14e1** and groove **14e2**.

(84) Turning to FIG. **6**, depicted therein is a front perspective view of plate member **16** of device stand system **10**. Depicted implementation of plate member **16** is shown to include side **16a**, side **16b**, side **16c**, side **16d**, base **16e** with aperture **16e1**, aperture **16e2**, protruded surface portion **16e3**, protruded surface portion **16e4**, and chanel **16e5**.

(85) Turning to FIG. **7**, depicted therein is an enlarged front perspective view of a portion of plate member **16** with protruded surface portion **16e3**, protruded surface portion **16e4**, and chanel **16e5** of device stand system **10**. Depicted implementation of protruded surface portion **16e3** is shown to include base **16e3a**, threaded aperture **16e3b**, non-threaded aperture **16e3c**, and threaded aperture **16e3d**. Depicted implementation of protruded surface portion **16e4** is shown to include base **16e4a**, threaded aperture **16e4b**, non-threaded aperture **16e4c**, and threaded aperture **16e4d**. Depicted implementation of chanel **16e5** is shown to include channel portion **16e5a** and channel portion **16e5b**.

(86) Turning to FIG. **8**, depicted therein is a front perspective view of device holder back member **18** of device stand system **10**. Depicted implementation of device holder back member **18** is shown to include side **18a**, side **18b**, side **18c**, side **18d**, base **18e** with elongated aperture **18e1**, camera aperture **18e2**, and threaded aperture **18e3**.

(87) Turning to FIG. **9**, depicted therein is a front perspective view of stand upper back member **20** of device stand system **10**. Depicted implementation of stand upper back member **20** is shown to include side **20a**, side **20b**, side **20c**, side **20d** with base **20e** with threaded aperture **20e1**, and threaded aperture **20e2**.

(88) Turning to FIG. **10**, depicted therein is an exploded front perspective view of a first version of rotatable assembly **22a** with coupling member **22b**, and coupling member **22c**. As depicted, coupling member **22b** includes rectangular portion **22b1**, threaded aperture **22b2**, peg portion **22b3**, threaded aperture **22b4**, and socket **22b5**. As depicted, coupling member **22c** includes plate portion **22c1**, aperture **22c2**, aperture **22c3**, cylindrical portion **22c4**, and plug portion **22c5**.

(89) Turning to FIG. **11**, depicted therein is an exploded front perspective view of a second version of rotatable assembly **22d** of hinge assembly **22** of device stand system **10**. As depicted, rotatable assembly **22d** includes coupling member **22e**, and coupling member **22f**. As depicted, coupling member **22e** includes rectangular portion **22e1**, threaded aperture **22e2**, peg portion **22e3**, threaded aperture **22e4**, and plug portion **22e5**. As depicted, coupling member **22f** includes plate portion **22f1**, aperture **22f2**, aperture **22f3**, cylindrical portion **22f4**, and socket portion **22f5**.

(90) Turning to FIG. **12**, depicted therein is a front perspective view of cylindrical member **22g** of hinge assembly **22** of device stand system **10**. As depicted, cylindrical member **22g** is shown to include end **22g1**, end **22g2**, side **22g3**, side **22g4**, and aperture **22g5**, aperture **22g6**, aperture **22g7**, aperture **22g8**, aperture **22g9**, support portion **22g10**, internal surface **22g11**, support portion **22g12**, support portion **22g13**, support portion **22g14**, and internal surface **22g15**.

(91) Turning to FIG. **13**, depicted therein is an exploded front perspective view of hinge assembly **22** of device stand system **10**, which includes coupling member **22i** and coupling member **22j**. As depicted, coupling member **22i** includes rectangular portion **22i1**, threaded aperture **22i2**, peg portion **22i3**, threaded aperture **22i4**, and plug portion **22i5**. As depicted, coupling member **22j**

includes plate portion **22j1**, aperture **22j2**, aperture **22j3**, cylindrical portion **22j4**, and socket portion **22j5**.

(92) Turning to FIG. **14**, depicted therein is a front perspective view of hinge assembly **22** of device stand system **10**.

(93) Turning to FIG. **15**, depicted therein is a front perspective view of stand upper front member **24** of device stand system **10**. As depicted, stand upper front member **24** is shown to include side **24a**, side **24b**, side **24c**, side **24d**, and base **24e**. As depicted, side **24c** is shown to include tab member **24c1** with aperture **24c1a**, and tab member **24c2** with aperture **24c2a**. Depicted implementation of stand upper front member **24** is shown to include base **24e** with aperture **24e1** and aperture **24e2**.

(94) Turning to FIG. **16**, depicted therein is a front perspective view of stand lower member **26** of device stand system **10**. Depicted implementation of stand lower member **26** is shown to include lower portion **26a**, and upper portion **26b** with coupling edge **26b1**.

(95) Turning to FIG. **17**, depicted therein is a front perspective partial view of device stand system **10**.

(96) Turning to FIG. **18**, depicted therein is a side elevational partial view of stand assembly of device stand system **10**.

(97) Turning to FIG. **19**, depicted therein is a side elevational partial view of stand assembly of device stand system **10**.

(98) Turning to FIG. **20**, depicted therein is a rear perspective view of device stand system **10** with portable electronic tablet device **100**.

(99) Turning to FIG. **21**, depicted therein is a exploded rear perspective view of device stand system **10**.

(100) Turning to FIG. **22**, depicted therein is a rear perspective view of device holder front member **14** of device stand system **10**.

(101) Turning to FIG. **23**, depicted therein is a rear perspective view of plate member **16** of device stand system **10**.

(102) Turning to FIG. **24**, depicted therein is a rear perspective view of device holder back member **18** of device stand system **10**.

(103) Turning to FIG. **25**, depicted therein is a rear perspective view of stand upper back member **20** of device stand system **10**.

(104) Turning to FIG. **26**, depicted therein is an exploded rear perspective view of a first version of rotatable assembly **22a** of hinge assembly **22** of device stand system **10**. Depicted implementation of rotatable assembly **22a** is shown to include coupling member **22b** with surface portion **22b6**.

(105) Turning to FIG. **27**, depicted therein is an exploded rear perspective view of a second version of rotatable assembly **22d** of hinge assembly **22** of device stand system **10**. Depicted implementation of rotatable assembly **22d** is shown to include coupling member **22e** with surface portion **22e6**.

(106) Turning to FIG. **28**, depicted therein is a rear perspective view of cylindrical member **22g** of hinge assembly **22** of device stand system **10**. Depicted implementation of cylindrical member **22g** is shown to include aperture **22g16**, aperture **22g17**, aperture **22g18**, and aperture **22g19**.

(107) Turning to FIG. **29**, depicted therein is an exploded rear perspective view of hinge assembly **22** of device stand system **10**. Depicted implementation of hinge assembly **22** is shown to include coupling member **22i** with surface portion **22i6**.

(108) Turning to FIG. **30**, depicted therein is a rear perspective view of hinge assembly **22** of device stand system **10**.

(109) Turning to FIG. **31**, depicted therein is a rear perspective view of stand upper front member **24** of device stand system **10**. Depicted implementation of stand upper front member **24** is shown to include base **24e** with coupling surface **24e3** and coupling surface **24e4**. Depicted implementation of coupling surface **24e3** is shown to include threaded aperture **24e3a**, protrusion



**24e3b**, and threaded aperture **24e3c**. Depicted implementation of coupling surface **24e4** is shown to include threaded aperture **24e4a**, protrusion **24e4b**, and threaded aperture **24e4c**.

(110) Turning to FIG. **32**, depicted therein is a rear perspective view of stand lower member **26** of device stand system **10**.

(111) Turning to FIG. **33**, depicted therein is a rear perspective partial view of stand assembly of device stand system **10**.

(112) Turning to FIG. **34**, depicted therein is a front perspective partially exploded view of device stand system **10** and portable electronic tablet device **100**. In implementations device stand system **10** is shown to include electronic cable assembly **28**. In implementations electronic cable assembly **28** is shown to include connector **28a** and electronic cable **28b**. In implementations channel **16e5** is shown to include bracket **16e5c**.

(113) Turning to FIG. **35**, depicted therein is a front perspective partially exploded view of device stand system **10** and portable electronic tablet device **100**. In implementations device stand system **10** is shown to include electrical connector assembly **14f** coupled with portable electronic tablet device **100** and being moved in direction **A1** to couple with connector **28a** of electronic cable assembly **28**. In implementations electrical connector assembly **14f** is shown to include electrical connector plug assembly **14f1** (such as having a universal serial bus connector plug), electrical cable assembly **14f2**, and electrical connector port assembly **14f3** (such as having a universal serial bus connector port).

(114) Turning to FIG. **36**, depicted therein is a front perspective partial view of device stand system **10**.

(115) Turning to FIG. **37**, depicted therein is a front perspective view of stand assembly **10b** with electronic cable assembly **28**.

(116) Turning to FIG. **38**, depicted therein is a front perspective view of stand lower member **26** with electronic cable assembly **28**.

(117) Turning to FIG. **39**, depicted therein is an exploded front perspective view of stand lower member **26** with electronic cable assembly **28**. In implementations stand lower member **26** is shown to include coupler **26a1** and magnet **26a2**. In implementations stand lower member **26** is shown to include base assembly **26c**. In implementations base assembly **26c** is shown to include base member **26c3**. In implementations base member **26c3** is shown to include support **26c3c**, support **26c3d**, and channel **26c3e**. In implementations support **26c3c** is shown to include magnet **26c3c1**. In implementations support **26c3d** is shown to include magnet **26c3d1**.

(118) In implementations stand assembly **10b** is rotatably coupled with base assembly **26c** to rotate relative to base assembly **26c** about axis of rotation **AR1** in rotational direction **R1** (as shown such as by FIG. **55**) from first rotational position (as shown such as by FIGS. **34-39**) to second rotational position (as shown such as by FIGS. **56-57**). In implementations electronic cable assembly **28** remains coupled with device holder assembly **10a** when stand assembly **10b** rotates from first rotational position through to second rotational position. In implementations magnet **26a2** is positioned within channel **26c3e** as semi-circularly shaped to allow movement of magnet **26a2** within channel **26c3e** during rotation of stand assembly **10b** relative to base assembly **26c**. In implementations magnet **26c3d1** is positioned on base member **26c3** to engage with magnet **26a2** when stand assembly **10b** is the first rotational position with respect to base assembly **26c** as shown in FIG. **39**.

(119) Turning to FIG. **40**, depicted therein is an exploded front perspective view of base assembly **26c** with electronic cable assembly **28**. In implementations base assembly **26c** is shown to include cover **26c1**, bearing assembly **26c2**, cover plate **26c4**, and sheet **26c5**. In implementations base member **26c3** is shown to include aperture **26c3a** and base portion **26c3b**. In implementations electronic cable **28b** is shown to include cable portion **28b1**, cable portion **28b2**, cable portion **28b3**, cable portion **28b4**, and cable portion **28b5**. In implementations electronic cable assembly **28** is shown to include interface **28c**. In implementations stand assembly **10b** is rotatably coupled with

base assembly **26c** via bearing assembly **26c2**.

(120) In implementations cable portion **28b4** is positioned adjacent and coiled along base member **26c3** to be movable between a first coiled configuration such as shown in FIG. **39** associated with first rotational position of stand assembly **10b** with respect to base assembly **26c** and between a second coiled configuration such as shown in FIG. **57** associated with second rotational position of stand assembly **10b** with respect to base assembly **26c**.

(121) Turning to FIG. **41**, depicted therein is a perspective view of electronic cable assembly **28**.

(122) Turning to FIG. **42**, depicted therein is a perspective view of electronic cable assembly **28**.

(123) Turning to FIG. **43**, depicted therein is an exploded rear perspective view of stand assembly **10b** with electronic cable assembly **28**.

(124) Turning to FIG. **44**, depicted therein is an exploded rear perspective view of stand assembly **10b** with hinge assembly **22** and electronic cable assembly **28**. In implementations upper portion **26b** is shown to include exterior aperture **26b2**.

(125) Turning to FIG. **45**, depicted therein is a rear perspective view of stand lower member **26** with electronic cable assembly **28**.

(126) Turning to FIG. **46**, depicted therein is a rear perspective view of stand lower member **26**.

(127) Turning to FIG. **47**, depicted therein is a front perspective view of base assembly **26c** with electronic cable assembly **28**. In implementations bearing assembly **26c2** is shown to include coupler **26c2b** and center **26c2c**.

(128) Turning to FIG. **48**, depicted therein is a top perspective partial view of base assembly **26c**. In implementations aperture **26c3a** is shown to include collar portion **26c3a1** and aperture **26c3a2**. In implementations base portion **26c3b** is shown to include channel **26c3b1**, channel **26c3b2**, aperture **26c3b3**. In implementations channel **26c3b2** is sized and shaped to receive and couple with interface **28c**. In implementations interface **28c** of electronic cable assembly **28** is coupled to base assembly **26c** via channel **26c3b2** as stand assembly **10b** rotates relative to base assembly **26c**. In implementations aperture **26c3b3** allows for external access to interface **28c**.

(129) Turning to FIG. **49**, depicted therein is a bottom perspective partial view of stand lower member **26**. In implementations lower portion **26a** is shown to include clip **26a3**, magnet holder **26a4**, and inner assembly **26a5**. In implementations inner assembly **26a5** is shown to include stem **26a5a**, aperture **26a5b**, disk **26a5c**, channel **26a5d**, interior **26a5e**, rim **26a5f**, channel **26a5g**, and bottom **26a5h**. In implementations cable portion **28b2** remains coupled with stand assembly **10b**, such as with coupler **26a1** shown in FIG. **40**, while stand assembly **10b** rotates through first and second rotational positions with respect to base assembly **26c**. In implementations cable portion **28b1** remains coupled with stand assembly **10b**, such as with clip **26a3** shown in FIG. **49**, while stand assembly **10b** rotates through first and second rotational positions with respect to base assembly **26c**.

(130) Turning to FIG. **50**, depicted therein is a front perspective view of bearing assembly **26c2**. In implementations bearing assembly **26c2** is shown to include center **26c2a**, rim **26c2d**, notch **26c2e**, and aperture **26c2f**.

(131) Turning to FIG. **51**, depicted therein is a front perspective view of cover plate **26c4**. In implementations cover plate **26c4** is shown to include interior **26c4a** and tabs **26c4b**.

(132) Turning to FIG. **52**, depicted therein is a rear perspective view of cover plate **26c4**

(133) Turning to FIG. **53**, depicted therein is a front perspective view of sheet **26c5**. In implementations sheet **26c5** is shown to include interior **26c5a**, notch **26c5b**, and center aperture **26c5c**.

(134) Turning to FIG. **54**, depicted therein is a top perspective view of base assembly **26c**.

(135) Turning to FIG. **55**, depicted therein is a front perspective view of device stand system **10** with portable electronic tablet device **100** shown rotating in mid rotational position. In implementations device stand system **10** is shown to include device holder assembly **10a**, portable electronic tablet device **100**, lower portion **26a** of stand lower member **26** and upper portion **26b** of

lower portion **26a** being rotated about axis of rotation **AR1** in rotational direction **R1** with respect to base assembly **26c**. In implementations, although not shown in FIG. 55, stand upper front member **24** of stand assembly **10b** is also being rotated about axis of rotation **AR1** in rotational direction **R1** with respect to base assembly **26c**.

(136) Turning to FIG. 56, depicted therein is a rear perspective view of device stand system **10** with portable electronic tablet device **100** shown to have been rotated from first rotational position through mid rotational position to its present second rotational position.

(137) Turning to FIG. 57, depicted therein is a rear perspective view of device stand system **10** with portable electronic tablet device **100** shown in second rotational position. In implementations magnet **26c3c1** is positioned on base member **26c3** to engage with magnet **26a2** when stand assembly **10b** is in second rotational position with respect to base assembly **26c**. In implementations cable portion **28b4** is less coiled in first coiled position of first rotational position as shown for instance in FIG. 40 compared with second coiled position of second rotation position as shown in FIG. 57.

(138) Turning to FIG. 58, depicted therein is a bottom perspective partial view of base assembly **26c** of device stand system **10**.

(139) Turning to FIG. 59, depicted therein is a front perspective of portable electronic tablet device **100** including side **100a**, side **100b** with electrical port **100b1** (such as universal serial bus port for electrical power connection capability, data connection capability, and/or video connection capability connection), side **100c**, side **100d**, and display **100e**.

(140) Turning to FIG. 60, depicted therein is a front perspective of device stand system **10**.

(141) Turning to FIG. 61, depicted therein is a front perspective of a portion of device stand system **10**.

(142) Turning to FIG. 62, depicted therein is a side perspective of a portion of device stand system **10** with connector in a first position.

(143) Turning to FIG. 63, depicted therein is a front perspective of a portion of device stand system **10** with connector in a first position. In implementations electrical connector plug assembly **14f1** is shown to body member **14f1a** and electrical connector plug **14f1b** (such as universal serial bus electrical connector plug) with end portion **14f1b1** positioned distance **D1** from base **14e**.

(144) Turning to FIG. 64, depicted therein is a side perspective of a portion of device stand system **10** with connector in a second position.

(145) Turning to FIG. 65, depicted therein is a front perspective of a portion of device stand system **10** with connector in a second position with end portion **14f1b1** positioned distance **D2** from base **14e** wherein distance **D2** is greater than distance **D1**.

(146) Turning to FIG. 66, depicted therein is a front perspective of a portion of device stand system **10** with portable electronic tablet device **100**.

(147) Turning to FIG. 67, depicted therein is a front perspective of device stand system **10** with portable electronic tablet device **100**.

(148) Turning to FIG. 68, depicted therein is a front perspective of a portion of device stand system **10**.

(149) Turning to FIG. 69, depicted therein is a front perspective of a portion of device stand system **10**. In implementations body member **14f1a** includes pivot pin member **14f1a1** and pivot pin member **14f1a2**. In implementations device holder back member **18** includes support post member **18f** and support post member **18g** in which pivot pin member **14f1a1** is pivotally coupled with support post member **18f** and pivot pin member **14f1a2** is pivotally coupled with support post member **18g**.

(150) Turning to FIG. 70, depicted therein is a front perspective of a portion of device stand system **10**.

(151) Turning to FIG. 71, depicted therein is a front perspective of a portion of device holder back member **18**. In implementations support post member **18f** includes notch **18f1** to pivotally couple

post member **18f** with pivot pin member **14f1a1** and support post member **18g** includes notch **18g1** to pivotally couple post member **18g** with pivot pin member **14f1a2**.

(152) Turning to FIG. **72**, depicted therein is a side elevational view of electrical connector assembly **14f**.

(153) Turning to FIG. **73**, depicted therein is a side elevational view of electrical connector plug assembly **14f1**.

(154) Turning to FIG. **74**, depicted therein is a front elevational view of electrical connector assembly **14f**.

(155) Turning to FIG. **75**, depicted therein is a top plan view of electrical connector plug assembly **14f1**.

(156) While particular aspects of the present subject matter described herein have been shown and described, it will be apparent to those skilled in the art that, based upon the teachings herein, changes and modifications may be made without departing from the subject matter described herein and its broader aspects and, therefore, the appended claims are to encompass within their scope all such changes and modifications as are within the true spirit and scope of the subject matter described herein. It will be understood by those within the art that, in general, terms used herein, and especially in the appended claims (e.g., bodies of the appended claims) are generally intended as “open” terms (e.g., the term “including” should be interpreted as “including but not limited to,” the term “having” should be interpreted as “having at least,” the term “includes” should be interpreted as “includes but is not limited to,” etc.). It will be further understood by those within the art that if a specific number of an introduced claim recitation is intended, such an intent will be explicitly recited in the claim, and in the absence of such recitation no such intent is present. For example, as an aid to understanding, the following appended claims may contain usage of the introductory phrases “at least one” and “one or more” to introduce claim recitations. However, the use of such phrases should not be construed to imply that the introduction of a claim recitation by the indefinite articles “a” or “an” limits any particular claim containing such introduced claim recitation to claims containing only one such recitation, even when the same claim includes the introductory phrases “one or more” or “at least one” and indefinite articles such as “a” or “an” (e.g., “a” and/or “an” should typically be interpreted to mean “at least one” or “one or more”); the same holds true for the use of definite articles used to introduce claim recitations. In addition, even if a specific number of an introduced claim recitation is explicitly recited, those skilled in the art will recognize that such recitation should typically be interpreted to mean at least the recited number (e.g., the bare recitation of “two recitations,” without other modifiers, typically means at least two recitations, or two or more recitations). Furthermore, in those instances where a convention analogous to “at least one of A, B, and C, etc.” is used, in general such a construction is intended in the sense one having skill in the art would understand the convention (e.g., “a system having at least one of A, B, and C” would include but not be limited to systems that have A alone, B alone, C alone, A and B together, A and C together, B and C together, and/or A, B, and C together, etc.). In those instances where a convention analogous to “at least one of A, B, or C, etc.” is used, in general such a construction is intended in the sense one having skill in the art would understand the convention (e.g., “a system having at least one of A, B, or C” would include but not be limited to systems that have A alone, B alone, C alone, A and B together, A and C together, B and C together, and/or A, B, and C together, etc.). It will be further understood by those within the art that typically a disjunctive word and/or phrase presenting two or more alternative terms, whether in the description, claims, or drawings, should be understood to contemplate the possibilities of including one of the terms, either of the terms, or both terms unless context dictates otherwise. For example, the phrase “A or B” will be typically understood to include the possibilities of “A” or “B” or “A and B.”

(157) With respect to the appended claims, those skilled in the art will appreciate that recited operations therein may generally be performed in any order. Also, although various operational

flows are presented in a sequence(s), it should be understood that the various operations may be performed in other orders than those which are illustrated, or may be performed concurrently. Examples of such alternate orderings may include overlapping, interleaved, interrupted, reordered, incremental, preparatory, supplemental, simultaneous, reverse, or other variant orderings, unless context dictates otherwise. Furthermore, terms like “responsive to,” “related to,” or other past-tense adjectives are generally not intended to exclude such variants, unless context dictates otherwise.

## Claims

1. A device stand system for a portable electronic tablet device having an electrical connector port, the device stand system comprising: (I) a device holder assembly couplable with the portable electronic tablet device, the device holder assembly including: a base portion, a first side wall portion extending perpendicularly from the base portion, a second side wall portion extending perpendicularly from the base portion, a third side wall portion extending perpendicularly from the base portion, and a fourth side wall portion extending perpendicularly from the base portion, wherein the second side wall portion perpendicularly extends with respect to the first side wall portion, wherein the third side wall portion parallelly extends with respect to the first side wall portion, and wherein the fourth side wall portion parallelly extends with respect to the second side wall portion; (II) a stand assembly coupled to the device holder assembly; and (III) an electrical connector assembly including an electrical connector plug assembly with an electrical connector plug couplable with the electrical connector port of the portable electronic tablet device, wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly.
2. The system of claim 1 wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly to pivot about a first axis, and wherein the first axis is positioned parallel with the first side wall portion of the device holder assembly.
3. The system of claim 2 wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly to include a first pivotal position, wherein when electrical connector plug assembly is in the first pivotal position, the electrical connector plug extends perpendicularly with respect to the first side wall portion of the device holder assembly, and wherein the device holder assembly includes a device holder back member.
4. The system of claim 3 wherein the electrical connector plug assembly is pivotally coupled to the device holder assembly to include a second pivotal position, and wherein when the electrical connector plug assembly is in the second pivotal position, the electrical connector plug extends at an angle less than ninety degrees with respect to the first side wall portion of the device holder assembly.
5. The system of claim 4 wherein the electrical connector plug includes an end portion, wherein when the electrical connector plug assembly is in the first pivotal position, the end portion of the electrical connector plug is closer to the base portion than when the electrical connector plug assembly is in the second pivotal position, wherein the stand assembly includes a stand lower member having a lower portion and an upper portion extending from the lower portion at a first angle, wherein the stand assembly includes a stand upper front member coupled with the upper portion of the stand lower member and extending from the upper portion of the stand lower member at a second angle, and wherein the sum of the first angle and the second angle is greater than ninety degrees.
6. The system of claim 1 wherein the electrical connector plug assembly includes a body member, wherein the body member includes a first side portion, a second side portion, a first pivot pin member, and a second pivot pin member, wherein the first pivot pin member extends from the first side portion in a first direction, wherein the second pivot pin member extends from the second side portion in a second direction, and wherein the first direction is opposite of the second direction.
7. The system of claim 6 wherein the first pivot pin member and the second pivot pin member are

pivotaly coupled with the device holder assembly.

8. The system of claim 7 wherein the device holder assembly includes a first support post member and a second support post member, wherein the first pivot pin member is pivotaly coupled to the first support post member, and wherein the second pivot pin member is pivotaly coupled to the second support post member.

9. The system of claim 8 wherein the first support post member includes a first notch, wherein the first pivot pin member is pivotaly coupled to the first notch, wherein the second support post member includes a second notch, and wherein the second pivot pin member is pivotaly coupled to the second notch.

10. The system of claim 8 wherein the first support post member and the second support post member are coupled with the base portion and perpendicularly extend with respect to the base portion.

11. The system of claim 1 wherein the electrical connector assembly includes an electrical cable assembly electrically coupled with the connector plug assembly, and wherein the electrical connector assembly includes an electrical connector port assembly electrically coupled with the electrical cable assembly.

12. The system of claim 1 wherein the electrical connector plug includes electrical power connection capability with the electrical connector port of the portable electronic device.

13. The system of claim 1 wherein the electrical connector plug includes data connection capability with the electrical connector port of the portable electronic device.

14. The system of claim 1 wherein the electrical connector plug is of a universal serial bus type.

15. A device stand system for a portable electronic tablet device having an electrical connector port, the device stand system comprising: (I) a device holder assembly couplable with the portable electronic tablet device, the device holder assembly including: a base portion, a first side wall portion extending perpendicularly from the base portion, a second side wall portion extending perpendicularly from the base portion, a third side wall portion extending perpendicularly from the base portion, and a fourth side wall portion extending perpendicularly from the base portion, wherein the second side wall portion perpendicularly extends with respect to the first side wall portion, wherein the third side wall portion parallelly extends with respect to the first side wall portion, and wherein the fourth side wall portion parallelly extends with respect to the second side wall portion; and (II) an electrical connector assembly including an electrical connector plug assembly with an electrical connector plug couplable with the electrical connector port of the portable electronic tablet device, wherein the electrical connector plug assembly is pivotaly coupled to the device holder assembly.

16. The system of claim 15 wherein the electrical connector plug assembly is pivotably coupled to the device holder assembly to pivot about a first axis, wherein the first axis is positioned parallel with the first side wall portion of the device holder assembly, wherein the electrical connector plug assembly is pivotaly coupled to the device holder assembly to include a first pivotal position, wherein when electrical connector plug assembly is in the first pivotal position, the electrical connector plug extends perpendicularly with respect to the first side wall portion of the device holder assembly, wherein the electrical connector plug assembly is pivotaly coupled to the device holder assembly to include a second pivotal position, and wherein when the electrical connector plug assembly is in the second pivotal position, the electrical connector plug extends at an angle less than ninety degrees with respect to the first side wall portion of the device holder assembly.

17. The system of claim 16, further including a stand assembly coupled to the device holder assembly, wherein the stand assembly includes a stand lower member having a lower portion and an upper portion extending from the lower portion at a first angle, wherein the stand assembly includes a stand upper front member coupled with the upper portion of the stand lower member and extending from the upper portion of the stand lower member at a second angle, wherein the sum of the first angle and the second angle is greater than ninety degrees, wherein the electrical connector

plug assembly is pivotably coupled to the device holder assembly to pivot about a first axis, wherein the first axis is positioned parallel with the first side wall portion of the device holder assembly, wherein the electrical connector plug includes an end portion, and wherein when the electrical connector plug assembly is in the first pivotal position, the end portion of the electrical connector plug is closer to the base portion than when the electrical connector plug assembly is in the second pivotal position.

18. A device stand system for a portable electronic tablet device having an electrical connector port, the device stand system comprising: (I) a stand assembly couplable with the portable electric tablet device; and (II) an electrical connector assembly including an electrical connector plug assembly with an electrical connector plug couplable with the electrical connector port of the portable electronic tablet device, wherein the electrical connector plug assembly is pivotally coupled to the stand assembly, wherein the stand assembly includes a stand lower member having a lower portion and an upper portion extending from the lower portion at a first angle, wherein the stand assembly includes a stand upper front member coupled with the upper portion of the stand lower member and extending from the upper portion of the stand lower member at a second angle, and wherein the sum of the first angle and the second angle is greater than ninety degrees.

19. The system of claim 18, further including a device holder assembly couplable with the portable electronic tablet device, the device holder assembly including: a base portion, a first side wall portion extending perpendicularly from the base portion, a second side wall portion extending perpendicularly from the base portion, a third side wall portion extending perpendicularly from the base portion, and a fourth side wall portion extending perpendicularly from the base portion, wherein the second side wall portion perpendicularly extends with respect to the first side wall portion, wherein the third side wall portion parallelly extends with respect to the first side wall portion, wherein the fourth side wall portion parallelly extends with respect to the second side wall portion, wherein the electrical connector plug assembly includes a body member, wherein the body member includes a first side portion, a second side portion, a first pivot pin member, and a second pivot pin member, wherein the first pivot pin member extends from the first side portion in a first direction, wherein the second pivot pin member extends from the second side portion in a second direction, wherein the first direction is opposite of the second direction, and wherein the first pivot pin member and the second pivot pin member are pivotally coupled with the stand assembly.

20. The system of claim 18 wherein the electrical connector plug is of a universal serial bus type.

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