

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

THERMALTAKE TECHNOLOGY CO., LTD. and

THERMALTAKE INC.,

Petitioner,

v.

CHEN, CHIEN-HAO,

Patent Owner.

Case No. IPR2024-01230

U.S. Patent No. 10,690,336 B1

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

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I. Introduction

Pursuant to the Board's Scheduling Order (Paper 13) and Preliminary Guidance (Paper 25 or "Guidance"), as well as the Board's emails of September 8 and September 22, 2025 (Ex-3006), Patent Owner hereby files this Revised Contingent Motion to Amend (the "Motion"), wherein Patent Owner requests that the Board replace original claim 2 with substitute claim 6 should claim 2 be found unpatentable, and original claim 3 with substitute claim 7 should claim 3 be found unpatentable, for U.S. Patent No. 10,690,336 (the "'336 patent") (Ex-1001), as explained below. This Motion addresses the alleged §112 issues raised by the Board in its Guidance, and Patent Owner respectfully submits that the revised claims address the potential §112 issues identified by the Board. Further, as the Board preliminarily found, the prior art fails to render unpatentable the revised claims. Thus, Patent Owner respectfully requests this Motion be granted in the event the original challenged claims are found unpatentable based on the instituted grounds.

II. Statement of Relief Requested

Patent Owner hereby moves to amend the '336 patent. 37 C.F.R. § 42.121(f). Specifically, Patent Owner requests the Board order the replacement of claim 2 with substitute claim 6 should claim 2 be found unpatentable, and the replacement of claim 3 with claim 7 should claim 3 be found unpatentable. No other changes are proposed. 37 C.F.R. § 42.22(a)(1); 35 U.S.C. § 316(d).

III. Preliminary Guidance by the Board

Patent Owner appreciates the Guidance issued by the Board on September 10, 2025. The Guidance indicated that the previously proposed substitute claims might not be compliant with 35 U.S.C. §112. (Guidance at 5-14.) Patent Owner does not concede that the previously proposed substitute claims failed to comply with § 112,¹ but out of an abundance of caution this Motion proposes refinements to the substitute claims to address the potential § 112 issues. The Guidance also found that the proposed substitute claims were not obvious based on the prior art identified by Petitioner. (Guidance at 16-29.)

IV. The Motion and Proposed Amendments Comply With § 42.121

The Motion meets the requirements of § 41.121. The Motion is timely filed, is responsive to issues raised in the Guidance (Paper 25) and Petitioner's opposition to the motion to amend (Paper 24), and includes one or more new proposed substitute claims in place of the previously presented substitute claims, where each new proposed substitute claim presents a new claim amendment. 37 C.F.R. § 42.121(f).

The Motion's proposed amendments are also responsive to the grounds of unpatentability. 37 C.F.R. § 42.121(a)(2)(i). The Decision instituted trial against,

¹ As explained by Dr. Tuckerman, the prior substitute claims 6 and 7 are supported by the specification. (Ex-2052 at ¶¶ 24-27.)

inter alia, claims 2-3 of the '336 patent. The amendments proposed for claims 2-3 presented herein add limitations not found in the prior art relied on by Petitioner.

The amendments also do not enlarge the scope of the claims and do not introduce new subject matter. 37 C.F.R. § 42.121(a)(2)(ii). Specifically, proposed substitute claim 6 includes all the limitations of claim 1 plus additional limitations supported by the specification of the '336 patent and its priority application. Likewise, proposed substitute claim 7 includes all the limitations of claim 1 plus additional limitations beyond those included in proposed substitute claim 6, all of which are supported by the specification of the '336 patent and its priority application. A reasonable number of substitute claims are also presented because the proposed amendments seek a one-to-one correspondence between proposed substitute claims 6-7 and original claims 2-3. 37 C.F.R. § 42.121(a)(3).

The Motion includes a claim listing (Appendix A) and identifies support in the original disclosure of the earliest priority application (the TW'659 application), the application for the '336 patent, and the '336 patent itself for the proposed amendments. 37 C.F.R. § 42.121(b)(1) and (b)(2). Accordingly, Patent Owner has satisfied all requirements of 37 C.F.R. § 42.121.

V. Claim Listing

Patent Owner's claim listing is attached hereto as Appendix A. 37 C.F.R. § 42.121(b). The '336 patent contains five original claims, and IPR was

instituted with respect to each of these claims. A clean listing of the proposed substitute claims is provided, as well as a redlined version showing the differences between the proposed substitute claims and the original claims.

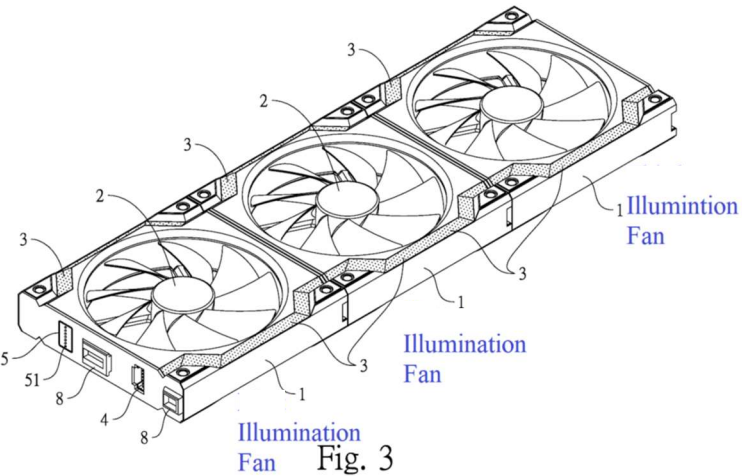
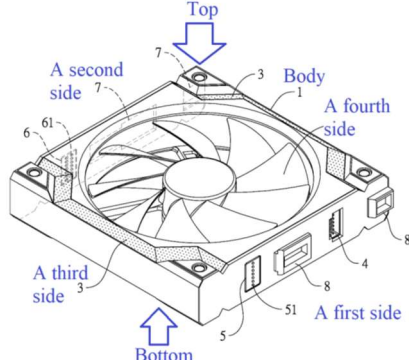
VI. The Originally Filed Application Provides Written Description Support for Each Proposed Amended Claim

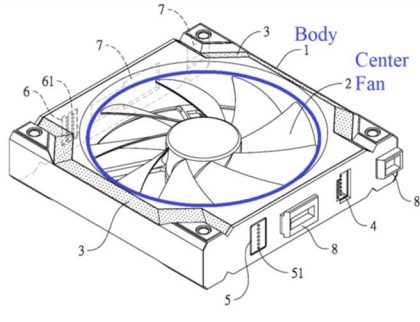
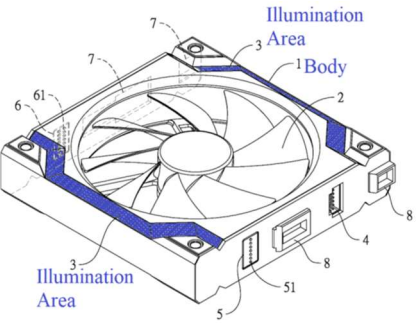
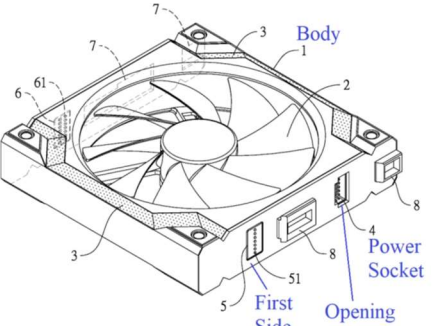
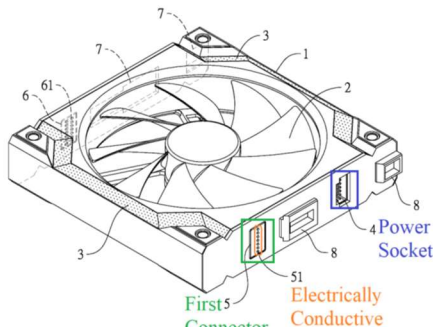
As noted previously, the '336 patent corresponds to patent application no. 16/403,867 ("the '867 application"). The as-filed version of the '867 application is shown at pages 51-63 of Ex-1002. The '867 application claims priority to a Taiwanese application (TW'659), filed December 26, 2018. The TW'659 application includes the same Figures 1-3 and substantially the same corresponding text as the '867 application. (*Compare* Ex-2017, pp. 16-27 with Ex-1002, pp. 51-61; *see also* Ex-2016.)

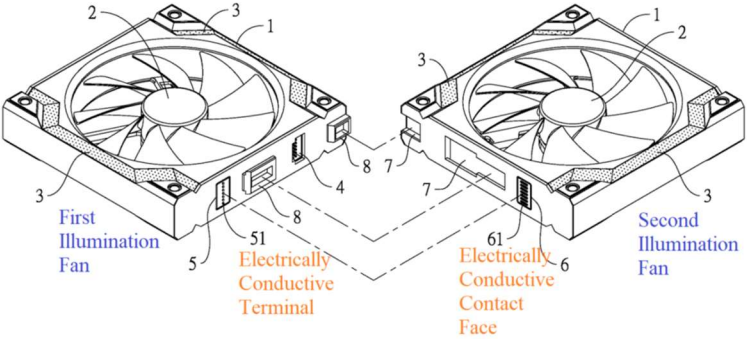
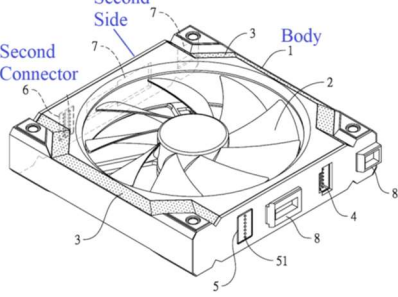
Patent Owner is only relying on disclosures contained in the '867 application and the TW'659 application. Specifically, Patent Owner is relying on embodiments primarily associated with Figures 1-3 and the corresponding disclosures in the specification, which are contained in both the '867 application and the TW'659 application, which provide written description support for the proposed substitute claims. Accordingly, there is adequate written description support for the proposed amended claims. 37 C.F.R. § 42.121(b).

A. Claim 6

Claim 6 includes all the limitations of claim 1, plus additional limitations supported by Figures 1-3 and the corresponding text of the '336 patent and its priority application. (Ex-2052 (Tuckerman) ¶¶ 29-31.)

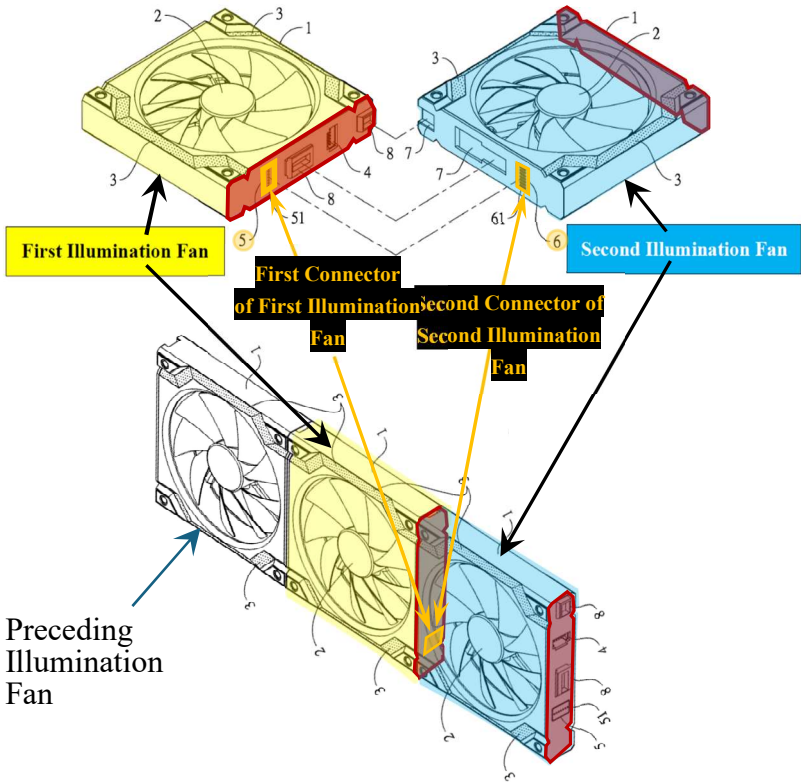
Claim / Limitation	Written Description Support
6. A ~~an~~ system comprising a first illumination fan for a computer connectable with a second at least one illumination fan for the computer, wherein:	FIG. 3 shows a system of illumination fans for a computer comprising at least a first illumination fan connected with a second illumination fan:  (See Ex-1001 at FIGS. 1-3, 1:50-52, 2:38-46, 2:57-60, 3:7-8; Ex-1002 at FIGS. 1-3 (pp. 59-61), pp. 55-57; Ex-2017 at pp. 24-27 (FIGS. 1-3) and pp. 19-22 (text corresponding that of Ex-1002).)
(A) the first illumination fan comprises: (i) a body comprising a top, a bottom, and sides, wherein the sides include at least a first side and a second side;	FIG. 1 shows a first illumination fan comprising a body (1) having a top, a bottom, and adjacent sides, with the sides including a first side and a second side. (See Ex-1001 at FIG. 1, 2:38-40, 2:61-67; Ex-1002 at FIG. 1 (p. 59), pp. 56-57; Ex-2017 at FIG. 1 (p. 25), pp. 21-22.) 

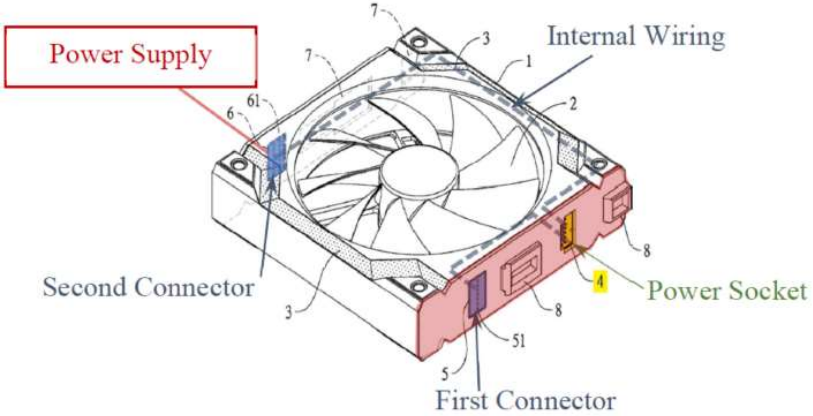
Claim / Limitation	Written Description Support
(ii), ~~provided with a center fan located in a center of the body;~~	FIG. 1 shows a first illumination fan comprising a center fan (2) located in the center of the body (1). (See Ex-1001 at FIG. 1, 2:68-3:3; Ex-1002 at FIG. 1 (p. 59), p. 57; Ex-2017 at FIG. 1 (p. 25.), pp. 21-22.)  Fig. 1
(iii) an illumination area located at the top of the body and disposed on at least two sides of the center fan ~~at top of the body;~~	FIG. 1 shows a first illumination fan comprising an illumination area (3) located at the top of the body (1) and disposed on at least two sides of the center fan (2). (See Ex-1001 at FIG. 1, 2:64-65; Ex-1002 at FIG. 1 (p. 59), p. 57; Ex-2017 at FIG. 1 (p. 25.), pp. 21-22.)  Fig. 1
(iv) a power socket comprising an opening disposed on the first side of the body; ~~and~~	FIG. 1 shows a first illumination fan comprising a power socket (4) comprising an opening disposed on a first side of the body (1). (See Ex-1001 at FIG. 1, 2:64-65; Ex-1002 at FIG. 1 (p. 59), p. 57; Ex-2017 at FIG. 1 (p. 25.), pp. 21-22.)  Fig. 1
(v) a first connector disposed on the first ~~one~~ side of the body, wherein the first connector is structurally distinct and separable from the power socket,	FIG. 1 shows a first illumination fan comprising a first connector (5) disposed on the first side of the body (1), wherein the first connector (5) is structurally distinct and separable from the power  Fig. 1

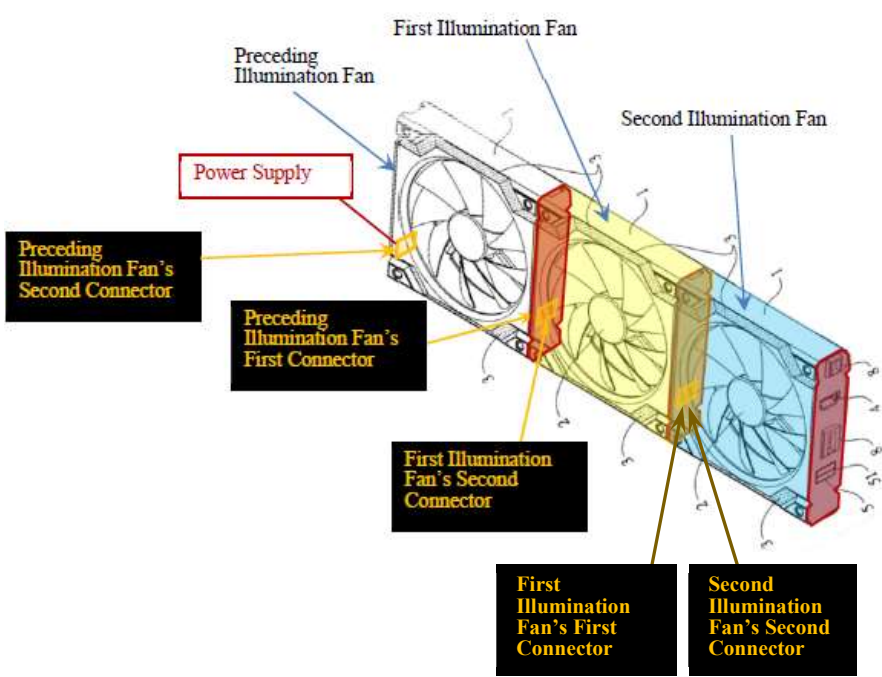
Claim / Limitation	Written Description Support
and wherein the first connector comprises a first electrical terminal configured to electrically connect with a second electrical terminal of the second illumination fan; and	socket (4), and wherein the first connector (1) comprises a first electrical terminal (51). FIG. 2 shows that the first electrical terminal (51) is configured to electrically connect with a second electrical terminal (61) of the second illumination fan.  Fig. 2 (See Ex-1001 at FIGS. 1-2, 2:64-65; Ex-1002 at FIGS. 1-2 (pp. 59-60), p. 57; Ex-2017 at FIGS. 1-2 (pp. 25-26), pp. 21-22.)
(vi) a second connector disposed on the second ~~another~~ side of the body;	FIG. 1 shows a first illumination fan comprising a second connector (6) disposed on a second side of the body (1). (See Ex-1001 at FIG. 1, 2:64-65; Ex-1002 at FIG. 1 (p. 59), p. 57; Ex-2017 at FIG. 1 (p. 25), p. 21-22.)  Fig. 1
(B) ~~wherein~~ the power socket is electrically connected with the first connector, the second connector, the center fan and the illumination area, such that when the power socket on the ~~one~~ first side of the body is supplied	The text of the specification describes that “the power socket [of the first illumination fan] is electrically connected with the first connector, the second connector, the center fan and the illumination area [of the first illumination fan],” as shown below: • “In order to achieve the above and other objects, the present invention provides an illumination fan connectable with at least one illumination fan for a computer, which may include a body, provided with a fan in a center of the body, an illumination area on at least two sides of the fan at top of the body, a

Claim / Limitation	Written Description Support
	Given that “the power socket [of the first illumination fan] is electrically connected with ... the second connector [of the first illumination fan],” the specification further supports that the first illumination fan can be connected with a <i>preceding illumination fan</i> that comes <i>before</i> the first illumination fan, such that the preceding fan’s first connector can be connected with the first illumination fan’s second connector to supply power, as illustrated below in an annotated FIG. 3: The diagram illustrates two fans connected in series. The 'Preceding Illumination Fan' (labeled 'a body 1') is on the left, and the 'First Illumination Fan' (labeled 'another body 1') is on the right. A yellow box highlights the 'Preceding Illumination Fan's First Connector' and the 'First Illumination Fan's Second Connector' which are joined together. Various components are labeled with numbers 1 through 15. (Ex-1001, FIG. 3 (annotations added).) The annotated FIG. 3 above exemplarily illustrates the configuration described in the text of the specification below, wherein “<i>a body 1</i>” corresponds to the preceding illumination fan indicated above and “<i>another body 1</i>” corresponds to the first illumination fan above: • “If at least two bodies 1 [of, respectively, the preceding illumination fan and the first illumination fan] are joined together to form multiple sets of fans (as shown in FIGS. 2 and 3), the first connector 5 is provided with an electrically conductive terminal

Claim / Limitation	Written Description Support
	51, and the second connector 6 is provided with an electrically conductive contact face 61 to be electrically connected with the electrically conductive terminal 51, so that <i>when the first connector 5 of a body 1</i> [of the preceding illumination fan] <i>is connected to the second connector 6 of another body 1</i> [of the first illumination fan], <i>the fan 2 of the another body 1 can be driven into rotation and the illumination area 3 can be illuminated.</i>” (See Ex-1001 at 3:7-16; Ex-1002 at p. 57; Ex-2017 at p. 27.) As shown above, because the first illumination fan’s second connector can receive power from the preceding illumination fan’s first connector and is electrically connected with the first illumination fan’s power socket, the first illumination fan’s power socket can thus be “supplied with power via the power socket’s electrical connection with the second connector” of the first illumination fan. And because the first illumination fan’s power socket is supplied with power via the first illumination fan’s second connector and electrically connected with the first illumination fan’s center fan and illumination area, the first illumination fan’s center fan and illumination area can be supplied with power by the power socket and driven into rotation and illumination, respectively. (See Ex-1001 at 3:4-6; <i>see also</i> Ex-2006, ¶ 27 (“As such, once the power socket 4 on the same side of the body 1 as the first connector 5 is supplied with power, the fan 2 of the body 1 can be driven into rotation and the illumination area 3 into illumination.”))
(C) when the first connector of the body of the first illumination fan is connected with a second connector of	The text of the specification describes the limitations of (C), as shown below: • “[<i>W</i>hen the first connector of the body [of the first illumination fan] is connected with a second connector of a body of [the second, i.e.,] another

Claim / Limitation	Written Description Support
a body of the second illumination fan, a center fan and an illumination area of the body of the second illumination fan are respectively driven into rotation and illumination.	<u>illumination fan, a fan and an illumination area of the body of [the second, i.e.,] another illumination fan can be respectively driven into rotation and illumination.”</u> (See Ex-1001 at 1:53-2:2; Ex-1002 at p. 55; Ex-2017 at p. 20.)  (See Ex-1001, FIGS. 2-3 (annotations added).) Note that limitations (B) and (C) can be concurrently met by the above embodiment because the first illumination fan’s power socket 4 can receive power from the first illumination fan’s second connector 6, which can receive power from the preceding illumination fan’s first connector 5, as discussed above in limitation (B). (See Ex-1001, 3:4-16.)

Claim / Limitation	Written Description Support
	A person of ordinary skill in the art (“POSITA”) would have understood that, in a similar manner as the first illumination fan’s second connector receiving power from the preceding illumination fan, the preceding illumination fan’s second connector can receive power from a power supply, as shown below: Preceding Illumination Fan  Fig. 1 (See Ex-2036 (Ex-1001, FIG. 1 (annotated)); <i>see also</i> Ex-2002, ¶ 27 (“The power socket 4 of the embodiment shown in Figure 1 above can be supplied with power in various ways. For example, as shown above, the second connector [6] may receive power from a power supply, and the exemplary power socket 4 highlighted in yellow in the reproduced Figure 1 above can be supplied with power from behind by the second connector [6] that is electrically connected to the power socket through internal wiring of the illumination fan. The power socket 4 electrically connected with the first connector 5 can in turn supply power to the first connector 5 ‘so that when the first connector 5 of [an illumination fan’s] body 1 is connected to the second connector 6 of another [illumination fan’s] body 1, the fan 2 of the another [illumination fan’s] body 1 can be driven into rotation and the illumination area 3 [of the another illumination fan’s body 1] can be illuminated’.”); <i>see also</i> Ex-2051 (Wolfe Tr.) at 174:5-11 (“[Q.] Do you agree that the 336 specification does not exclude power connections on the first and second connectors? THE WITNESS: The

Claim / Limitation	Written Description Support
	336 specification does not exclude having power connections on the first and second connectors.”) (emphasis added) (objection omitted); <i>see also id.</i> at 204:20-205:2 (“Q. Dr. Wolfe, does the 336 patent exclude the second connector of the preceding illumination fan as labeled in Exhibit 2036 from connecting to a power supply? THE WITNESS: If by ‘exclude’ you only mean does it have an explicit statement saying that it’s impossible, then no.”) (objection omitted)). Indeed, Dr. Wolfe repeatedly referred to the “power socket 4” in the ’336 patent as “connector 4.” (<i>See, e.g.,</i> Ex-2051 (Wolfe Tr.) at 148:24-149:2, 149:22-24, 158:22-24, 161:14-18.) Given that the “power socket 4” is a connector that can be connected to a power supply, there is no reason why a POSITA would not have been able to connect a power supply to the second connector 6 of an illumination fan in the ’336 patent. In sum, a POSITA would have understood that, as a result, the overall configuration as permitted and supported by the specification is as follows: 

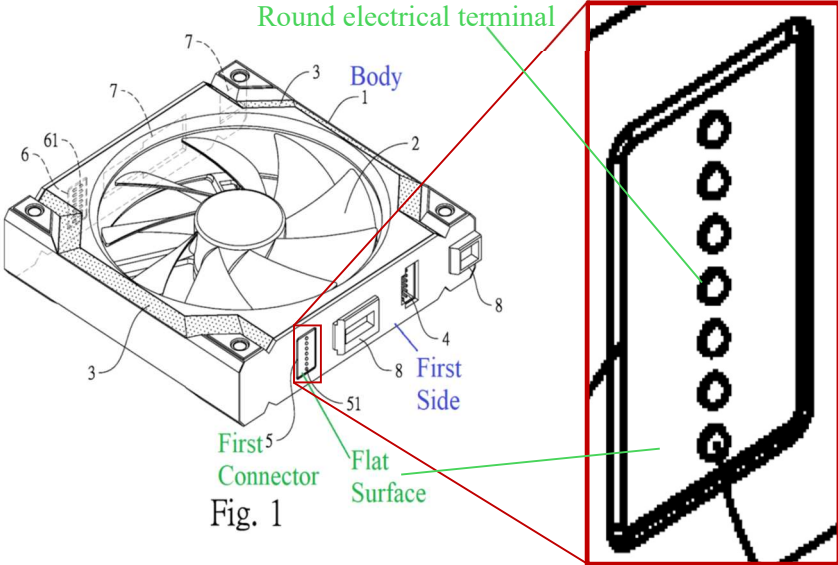
Claim / Limitation	Written Description Support
	(See Ex-2037; see also Ex-2002, ¶ 27.) It is noted that, because the exemplary power supply directly connected to the preceding illumination fan's second connector as shown above is not being claimed, such direct power connection on the second connector of the preceding illumination fan does not need to be expressly disclosed or taught by the '336 patent so long as this power connection is permitted and is not excluded thereunder. (See Ex-2051 (Wolfe Tr.) at 174:5-11 and 204:20-205:2.)

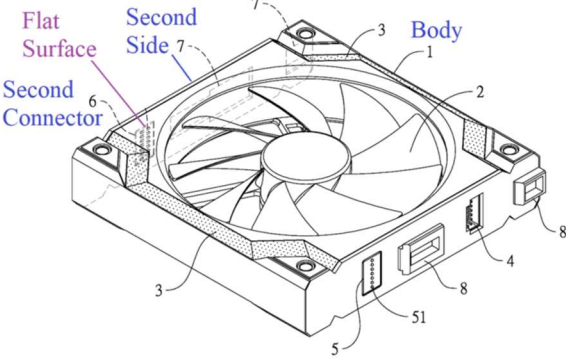
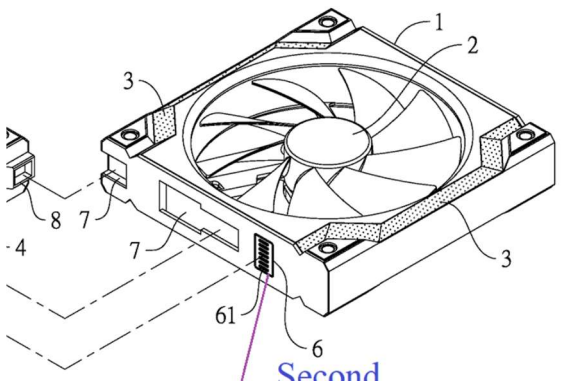
B. Claim 7

Claim 7 includes all the limitations of claims 1 and 6, plus additional limitations relating to a flat surface of each of the first and second connectors, with the flat surface of the first connector comprising round electrical terminals as supported by Figures 1-3 and the corresponding text of the '336 patent and its priority applications. (Ex-2052 (Tuckerman) at ¶ 32.)

Claim / Limitation	Written Description Support
7. A ~~an~~ system comprising a first illumination fan for a computer connect ~~abled~~ ed with a second ~~at least one~~ illumination fan for ~~at the~~ -computer, wherein:	This limitation is identical to claim 6, and thus has written description support for the same reasons provided above relative to claim 6.
(A) the first illumination fan comprises: (i) a body comprising a top, a bottom, and sides, wherein the sides	This limitation is identical to claim 6, and thus has written description support for the same reasons provided above relative to claim 6.

Claim / Limitation	Written Description Support
include at least a first side and a second side;	
(ii); ~~provided with a center fan located in a center of the body;~~	This limitation is identical to claim 6, and thus has written description support for the same reasons provided above relative to claim 6.
(iii) an illumination area located at the top of the body and disposed on at least two sides of the center fan ~~at top of the body;~~	This limitation is identical to claim 6, and thus has written description support for the same reasons provided above relative to claim 6.
(iv) a power socket comprising an opening disposed on the first side of the body; and	This limitation is identical to claim 6, and thus has written description support for the same reasons provided above relative to claim 6.
(v) a first connector comprising a first flat surface disposed on the first ~~one~~ side of the body, wherein the first connector is structurally distinct and separable from the power socket, and wherein the first flat surface comprises a first electrical terminal that is round and configured to electrically connect with a second	This limitation is identical to claim 6, except it further requires the first connector to have “a first flat surface.” FIG. 1 illustrates a first connector (5) with a first flat surface disposed on the first side of the body (1) and comprising a round electrical terminal.

Claim / Limitation	Written Description Support
electrical terminal of the second illumination fan; and	 (See Ex-1001 at FIG. 1, 2:61-3:16 Ex-1002 at FIG. 1 (p. 59), p. 57; Ex-2017 at FIG. 1 (p. 25), pp. 21-22.) The remainder of this limitation is the same as that of claim 6 and thus has written description support for the same reasons provided above relative to claim 6.
(vi) a second connector comprising a second flat surface disposed on the second ~~another~~ side of the body;	This limitation is identical to claim 6, except it further requires the second connector to have “a second flat surface.”

Claim / Limitation	Written Description Support
	FIG. 1 illustrates a second connector (6) with a second flat surface disposed on the second side of the body (1). FIG. 2 also shows the arrangement of a second connector (6) of an illumination fan having a flat surface. (See Ex-1001 at FIGS. 1-2, 2:61-3:16, Ex-1002 at FIGS. 1-2 (pp. 59-60), p. 57; Ex-2017 at FIGS. 1-2 (pp. 25-26), pp. 21-22.)  Fig. 1  Fig. 2
(B) ~~wherein~~ the power socket is electrically connected with the first connector, the second connector, the ~~center~~ fan and the illumination area, such that when the power socket on the ~~one~~ first side of the body is supplied with power via the power socket's electrical	This limitation is identical to claim 6, and thus has written description support for the same reasons provided above relative to claim 6.

Claim / Limitation	Written Description Support
connection with the second connector, the center fan and the illumination area of the body of the first illumination fan are respectively driven into rotation and illumination; and	
(C) when the first connector of the body of the first illumination fan is connected with a second connector of a body of another the second illumination fan, a center fan and an illumination area of the body of another the second illumination fan are respectively driven into rotation and illumination.	This limitation is identical to claim 6, and thus has written description support for the same reasons provided above relative to claim 6.

VII. The Substitute Claims Are Patentable

Proposed substitute claims 6 and 7 are supported by the specification and patentable over the cited prior art. Patent Owner first addresses the §112 issues raised by the Board in the Guidance:

(a) written description support for two illumination fans operating at the same time (limitations (B) and (C) when the first illumination fan's power socket is covered by the second illumination fan (Guidance at 7-11));

(b) indefiniteness relating to (a) (Guidance at 13-14); and

(c) indefiniteness as to whether the system claim requires one illumination fan or two (*id.*). (Ex-2052 (Tuckerman) at ¶ 33.)

As it relates to item (c), Patent Owner has amended the preamble of the substitute claims to clarify that at least two fans (first and second) are required. Thus, Patent Owner submits that item (c) has been addressed. (*Id.* at ¶ 34.)

As it relates to items (a) and (b), the claims have been amended to require:

“wherein ... (B) the power socket is electrically connected with the first connector, the second connector, the center fan and the illumination area, such that when the power socket on the first side of the body is supplied with power *via the power socket's electrical connection with the second connector*, the center fan and the illumination area of the body of the first illumination fan are respectively driven into rotation and illumination;”

(Ex-2052 (Tuckerman) at ¶ 35.)

As the Background of '336 patent explains:

[F]ans are usually provided during assembly to dispel heat accumulated inside a housing to the outside. However, *each fan has to be connected to the power supply through an independent power cable, so the*

number of fans that can be assembled is limited by the finite number of connections available on the power supply. This in turn limits the efficiency of heat dissipation. Furthermore, the additional wire inside the housing makes cable routing and managing much more cumbersome.

(Ex-1001 at 1:32-40; Ex-2052 (Tuckerman) at ¶ 36.)

The '336 patent further explains:

“As a result, once assembled, two fans that could be independently used can be joined together, and *power can be supplied by connecting the power socket of one of the bodies with a power supply of a computer to simultaneously drive the fans of the two bodies into rotation and the illumination areas into illumination. This solves the issue of insufficient power cables provided by the power supply and eliminates cumbersome routing due to large number of wires.* With the combinational design of the present invention, the efficiency of heat dissipation at any location in a computer can be greatly improved.”

(Ex-1001 at 3:29-39; Ex-2052 (Tuckerman) at ¶ 37.) In this regard, the '336 patent proposes that a preceding illumination fan supplies power to another illumination fan (adjacently joined with the preceding illumination fan) by connecting the terminals of a first connector of the preceding illumination fan to the terminals of a second connector of the another illumination fan as follows:

“[W]hen the first connector of the body of the [preceding] illumination fan is connected with the second connector of the body of another illumination fan, **the fan and the illumination area of the body of**

[the] another illumination fan can be respectively driven into rotation and illumination.”

(Ex-1001 at 3:7-16; Ex-1002 at p. 57; Ex-2017 at p. 27; Ex-2052 (Tuckerman) at ¶ 38.)) Thus, a power socket or connector of any one illumination fan among the interconnected illumination fans may be supplied with power from a preceding illumination fan, *i.e.*, it is not a requirement that any power socket or connector of an illumination fan be *directly* connected with the power supply to receive power. Indeed, a POSITA would have understood that the above text discloses embodiments in which a power socket of an illumination fan is supplied with power from a power supply *indirectly*. (Ex-2052 at ¶ 39.)

In the context of limitations (B) and (C), the Guidance stated “when first connector 5 of a first illumination fan is connected with second connector 6 of a second illumination fan (as in limitation (C)), the first fan’s power socket 4 is covered by the second fan such that the power socket does not appear to be accessible to be supplied with power.” (Guidance at 9.) In response, it is noted that the text of specification states that “power *can* be supplied by connecting the power socket of one of the bodies with a power supply of a computer to simultaneously drive the fans of the two bodies into rotation and the illumination areas into illumination.” (Ex-1001, 3:30-34 (emphasis added); Ex-2052 (Tuckerman) at ¶ 40.)

A POSITA would have understood that there is *no* requirement that the power socket be *directly* connected with any power supply, and that the power socket can

be supplied with power through its electrical connection with the second connector that can be connected with a preceding illumination fan or a power supply to receive power. That is, even if the opening of the power socket appears to be covered and inaccessible when the first connector of the first illumination fan is connected with the second connector of the second illumination fan, the power socket of the first illumination fan can nonetheless be supplied with power via the power socket's electrical connection with the first illumination fan's second connector, which can receive power from a first connector of a preceding illumination fan, which can receive power again directly or indirectly from a power supply, as disclosed by the '336 patent. Thus, Patent Owner submits that substitute claims 6 and 7 are §112 compliant. (Ex-2052 at ¶ 41.)

With respect to prior art, the burden to establish unpatentability lies only with Petitioner. *Aqua Products Inc. v. Matal*, 872 F.3d 1290, 1307 (Fed. Cir. 2017) (“Congress’s choice reflects its intention that the burden of proof be placed on the petitioner for all propositions of unpatentability arising during IPRs, whether related to originally challenged or entered amended claims.”). Patent Owner need only meet the requirements of 35 U.S.C. § 316(d) and 37 C.F.R. § 41.121(a)(2)-(3) and (b)(1)-(2), and the Board will proceed to determine whether the substitute claims are unpatentable by a preponderance of the evidence based on the entirety of the record. (See 37 C.F.R. § 41.121(d)(1); Patent Trial and Appeal Board, Consolidated Trial

Practice Guide, November 2019 at 67-8.) In the Guidance (at 16-29), the Board has preliminarily found a failure by Petitioner to show a reasonable likelihood that the proposed substitute claims 6 and 7 are obvious over Lai in view of Hasegawa and Tsuji in view of Huang. Patent Owner agrees with the Board. (Ex-2052 (Tuckerman) at ¶¶ 42-43.)

Independent claims 6 and 7 both require “(A)(iv) a power socket comprising an opening located on the first side of the body” and “(A)(v) a first connector disposed on the first side of the body, wherein the first connector is structurally distinct and separable from the power socket,” which are not taught by any of the cited prior art. Ex-2006, ¶ 117. As can be seen below, Lai discloses (at best) a *single* connector on each of the two opposite sides of a fan body.” (Ex-2006, ¶ 118; Ex-2052 (Tuckerman) at ¶¶ 44.)

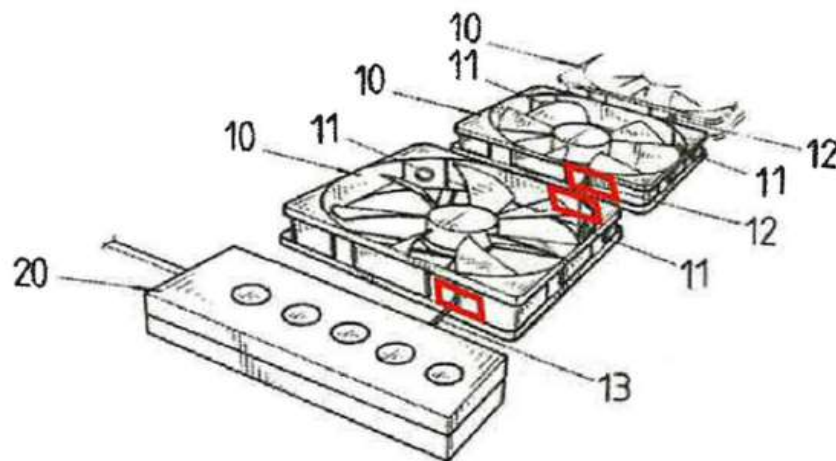
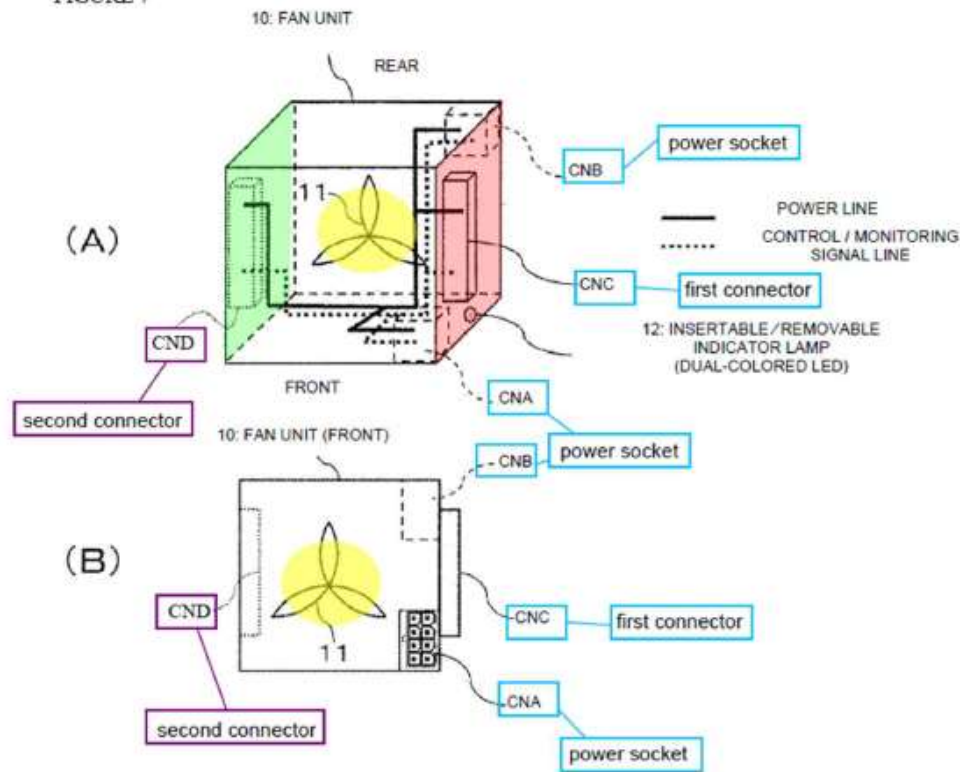


*FIG. 3 of Lai (modified to position connectors on sides of the LED fan 10 body as shown in **red** boxes)*

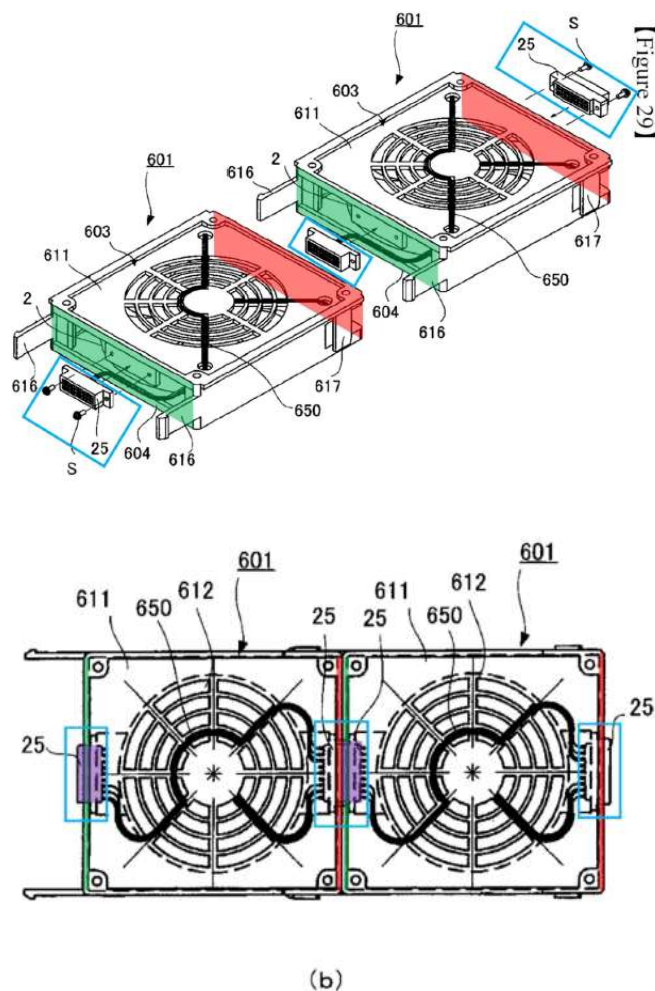
FIGURE 7



Similarly, Tsuji (above) discloses either a CNC connector having a protrusion or a CND connector having an opening only, but not *both* a power socket having an opening on the fan body's first side and a distinct first connector located on the *same* first side. (Ex-2052 (Tuckerman) at ¶ 45.)

Further, neither the CNC connector nor the CND connector of Tsuji has a flat surface comprising any round electrical terminal as required by claim 7. (*Id.* at ¶ 46.)

As shown below, Hasegawa (JP 2005051085 A) similarly fails to teach or suggest any of these requirements by having only a single connector (boxed in blue or purple) on each side (green or red) of the body without any round electrical terminal on a flat surface:



(Ex-2052 (Tuckerman) at ¶ 47.)

Huang also fails to disclose any of the above-mentioned requirements in claims 6 and/or 7 and thus cannot cure the deficiencies of Lai, Tsuji, and/or Hasegawa. (Ex-2052, ¶ 48.)

For at least the above reasons, substitute claims 6 and 7 patentably define over the prior art of Lai, Hasegawa, Tsuji, and Huang. (Ex-2052, ¶ 49.)

VIII. Conclusion

In view of the foregoing, the Revised Motion to Amend should be granted.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 3rd day of October 2025, a copy of this Patent Owner's Revised Motion to Amend Pursuant to 37 C.F.R. § 42.121 including all attachments and exhibits has been served in its entirety via electronic mail by emailing Petitioner's below counsel as per Petitioner's Mandatory Notices.

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APPENDIX A

REDLINED AND CLEAN VERSIONS OF THE PROPOSED SUBSTITUTE

Redlined Version (Relative to Original Claims 2 and 3)

~~2. The illumination fan connectable with at least one illumination fan for a computer of claim 1, wherein an electrically conductive terminal is provided in the first connector, and an electrically conductive contact surface is provided in the second connector for being electrically connected with the electrically conductive terminal, such that when the first connector of the body of the illumination fan is connected with the second connector of the body of another illumination fan, the fan and the illumination area of the body of another illumination fan are respectively driven into rotation and illumination.~~

6. A system comprising a first illumination fan for a computer connected with a second illumination fan for the computer, wherein:

(A) the first illumination fan comprises:

(i) a body comprising a top, a bottom, and sides, wherein the sides include at least a first side and a second side;

(ii) a center fan located in a center of the body;

(iii) an illumination area located at the top of the body and disposed on at least two sides of the center fan;

(iv) a power socket comprising an opening disposed on the first side of the body;

(v) a first connector disposed on the first side of the body, wherein the first connector is structurally distinct and separable from the power socket, and wherein the first connector comprises a first electrical terminal

configured to electrically connect with a second electrical terminal of the second illumination fan; and

(vi) a second connector disposed on the second side of the body;

(B) the power socket is electrically connected with the first connector, the second connector, the center fan and the illumination area, such that when the power socket on the first side of the body is supplied with power via the power socket's electrical connection with the second connector, the center fan and the illumination area of the body of the first illumination fan are respectively driven into rotation and illumination; and

(C) when the first connector of the body of the first illumination fan is connected with a second connector of a body of the second illumination fan, a center fan and an illumination area of the body of the second illumination fan are respectively driven into rotation and illumination.

~~3. The illumination fan connectable with at least one illumination fan for a computer of claim 1, wherein when the body of the illumination fan is connected with the body of another illumination fan, the illumination areas of the two bodies form a continuous illumination area.~~

7. A system comprising a first illumination fan for a computer connected with a second illumination fan for the computer, wherein:

(A) the first illumination fan comprises:

(i) a body comprising a top, a bottom, and sides, wherein the sides include at least a first side and a second side;

(ii) a center fan located in a center of the body;

(iii) an illumination area located at the top of the body and disposed on at least two sides of the center fan;

(iv) a power socket comprising an opening disposed on the first side of the body;

(v) a first connector comprising a first flat surface disposed on the first side of the body, wherein the first connector is structurally distinct and separable from the power socket, and wherein the first flat surface comprises a first electrical terminal that is round and configured to electrically connect with a second electrical terminal of the second illumination fan; and

(vi) a second connector comprising a second flat surface disposed on the second side of the body;

(B) the power socket is electrically connected with the first connector, the second connector, the center fan and the illumination area, such that when the power socket on the first side of the body is supplied with power via the power socket's electrical connection with the second connector, the center fan and the

illumination area of the body of the first illumination fan are respectively driven into rotation and illumination; and

(C) when the first connector of the body of the first illumination fan is connected with a second connector of a body of the second illumination fan, a center fan and an illumination area of the body of the second illumination fan are respectively driven into rotation and illumination.

Redlined Version (Relative to Original Claim 1)

6. A ~~n~~ system comprising a first illumination fan for a computer connect~~ed~~ with a second ~~at least one~~ illumination fan for ~~a~~the computer,

(A) the first illumination fan compris~~ing~~es:

(i) a body comprising a top, a bottom, and sides, wherein the sides include at least a first side and a second side;

(ii), ~~provided with~~ a center fan located in a center of the body;;

(iii) an illumination area located at the top of the body and disposed on at least two sides of the center fan ~~at top of the body~~;;

(iv) a power socket comprising an opening disposed on the first side of the body; ~~and~~

(v) a first connector disposed on the first ~~one~~ side of the body, wherein the first connector is structurally distinct and separable from the power socket, and wherein the first connector comprises a first electrical terminal configured to electrically connect with a second electrical terminal of the second illumination fan;; and

(vi) a second connector disposed on the second ~~another~~ side of the body;;

(B) ~~wherein~~ the power socket is electrically connected with the first connector, the second connector, the center fan and the illumination area, such that when the power socket on the ~~one~~ first side of the body is supplied with power via the power socket's electrical connection with the second connector, the center fan and the illumination area of the body of the first illumination fan are respectively driven into rotation and illumination;; and

(C) when the first connector of the body of the first illumination fan is connected with a second connector of a body of ~~another~~ the second illumination

fan, a **center** fan and an illumination area of the body of ~~another~~ the second illumination fan are respectively driven into rotation and illumination.

7. ~~A~~ system comprising a first illumination fan for a computer connectable with a second ~~at least one~~ illumination fan for ~~at~~ the computer, wherein:

(A) the first illumination fan comprises:

(i) a body comprising a top, a bottom, and sides, wherein the sides include at least a first side and a second side;

(ii) ~~provided with~~ a **center** fan located in a center of the body;;

(iii) an illumination area located at the top of the body and disposed on at least two sides of the **center** fan ~~at top of the body~~;;

(iv) a power socket comprising an opening disposed on the first side of the body; ~~and~~

(v) a first connector comprising a first flat surface disposed on the first ~~one~~ side of the body, wherein the first connector is structurally distinct and separable from the power socket, and wherein the first flat surface comprises a first electrical terminal that is round and configured to electrically connect with a second electrical terminal of the second illumination fan;; and

(vi) a second connector comprising a second flat surface disposed on the second ~~another~~ side of the body;;

(B) ~~wherein~~ the power socket is electrically connected with the first connector, the second connector, the **center** fan and the illumination area, such that when the power socket on the ~~one~~ first side of the body is supplied with power via the power socket's electrical connection with the second connector, the **center** fan and the illumination area of the body of the first illumination fan are respectively driven into rotation and illumination;; and

(C) when the first connector of the body of the first illumination fan is connected with a second connector of a body of ~~another~~ the second illumination fan, a center fan and an illumination area of the body of ~~another~~ the second illumination fan are respectively driven into rotation and illumination.

Clean Version

6. A system comprising a first illumination fan for a computer connected with a second illumination fan for the computer, wherein:

(A) the first illumination fan comprises:

(i) a body comprising a top, a bottom, and sides, wherein the sides include at least a first side and a second side;

(ii) a center fan located in a center of the body;

(iii) an illumination area located at the top of the body and disposed on at least two sides of the center fan;

(iv) a power socket comprising an opening disposed on the first side of the body;

(v) a first connector disposed on the first side of the body, wherein the first connector is structurally distinct and separable from the power socket, and wherein the first connector comprises a first electrical terminal configured to electrically connect with a second electrical terminal of the second illumination fan; and

(vi) a second connector disposed on the second side of the body;

(B) the power socket is electrically connected with the first connector, the second connector, the center fan and the illumination area, such that when the power socket on the first side of the body is supplied with power via the power socket's electrical connection with the second connector, the center fan and the illumination area of the body of the first illumination fan are respectively driven into rotation and illumination; and

(C) when the first connector of the body of the first illumination fan is connected with a second connector of a body of the second illumination fan, a

center fan and an illumination area of the body of the second illumination fan are respectively driven into rotation and illumination.

7. A system comprising a first illumination fan for a computer connected with a second illumination fan for the computer, wherein:

(A) the first illumination fan comprises:

(i) a body comprising a top, a bottom, and sides, wherein the sides include at least a first side and a second side;

(ii) a center fan located in a center of the body;

(iii) an illumination area located at the top of the body and disposed on at least two sides of the center fan;

(iv) a power socket comprising an opening disposed on the first side of the body;

(v) a first connector comprising a first flat surface disposed on the first side of the body, wherein the first connector is structurally distinct and separable from the power socket, and wherein the first flat surface comprises a first electrical terminal that is round and configured to electrically connect with a second electrical terminal of the second illumination fan; and

(vi) a second connector comprising a second flat surface disposed on the second side of the body;

(B) the power socket is electrically connected with the first connector, the second connector, the center fan and the illumination area, such that when the power socket on the first side of the body is supplied with power via the power socket's electrical connection with the second connector, the center fan and the illumination area of the body of the first illumination fan are respectively driven into rotation and illumination; and

(C) when the first connector of the body of the first illumination fan is connected with a second connector of a body of the second illumination fan, a center fan and an illumination area of the body of the second illumination fan are respectively driven into rotation and illumination.