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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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***EX PARTE* REEXAMINATION COMMUNICATION TRANSMITTAL FORM**

REEXAMINATION CONTROL NO. 90/019,565 .

PATENT UNDER REEXAMINATION 10690336 .

ART UNIT 3993 .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination	Control No. 90/019,565	Patent Under Reexamination 10690336	
	Examiner Laura L Davison	Art Unit 3993	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

- a. ☒ Responsive to the communication(s) filed on 02 July 2024.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- b. ☐ This action is made FINAL.
- c. ☒ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter.
Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**
If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. ☐ Notice of References Cited by Examiner, PTO-892. | 3. ☐ Interview Summary, PTO-474. |
| 2. ☐ Information Disclosure Statement, PTO/SB/08. | 4. ☐ _____. |

Part II SUMMARY OF ACTION

- 1a. ☒ Claims 1-5 are subject to reexamination.
- 1b. ☐ Claims _____ are not subject to reexamination.
2. ☐ Claims _____ have been canceled in the present reexamination proceeding.
3. ☐ Claims _____ are patentable and/or confirmed.
4. ☒ Claims 1-5 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
1 ☐ been received.
2 ☐ not been received.
3 ☐ been filed in Application No. _____.
4 ☐ been filed in reexamination Control No. _____.
5 ☐ been received by the International Bureau in PCT application No. _____.

* See the attached detailed Office action for a list of the certified copies not received.

9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.
10. ☐ Other: _____

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Service of Papers

After the filing of a request for reexamination by a third part requester, any document filed by either the patent owner or the third party requester must be served on the other party (or parties where two or more third party requester proceedings are merged) in the reexamination proceeding in the manner provided in 37 C.F.R. 1.248. *See* 37 C.F.R. 1.550(c).

Submissions

In order to ensure full consideration of any affidavits or declarations or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 C.F.R. 1.116 after final rejection and by 37 C.F.R. 41.33 after appeal, which will be strictly enforced.

Amendment in Reexamination Proceedings

Patent Owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 C.F.R. 1.52(a) and (b), and must be accompanied by any fees required by 37 C.F.R. 1.20(c). *See* MPEP § 2250, subsection IV, for

examples to assist in the preparation of proper proposed amendments in reexamination proceedings.

Notice of Concurrent Proceedings

Patent Owner is reminded of the continuing responsibility under 37 C.F.R. 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the patent throughout the course of this reexamination proceeding. Likewise, the third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. *See* MPEP §§ 2207, 2282, and 2286.

Extensions of Time

Extensions of time under 37 C.F.R. 1.136(a) will not be permitted in these proceedings because the provisions of 37 C.F.R. 1.136 apply only to “an applicant” and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings “will be conducted with special dispatch” (37 C.F.R. 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 C.F.R. 1.550(c).

Brief Description of the Proceedings

The Third Party Requester (TPR) requested reexamination of claims 1-5 of U.S. Patent No. 10,690,336 (hereinafter the ‘336 patent) based upon the following proposed rejections:

Ground 1: Claims 1-4 are unpatentable in light of Fujitsu (JP 2018041147 A, hereinafter Fujitsu) in combination with Tsai (CN 207064277 U, hereinafter Tsai).

Ground 2: Claim 5 is unpatentable in light of Fujitsu in combination with Tsai and Chou et al. (US 2008/0279694 A1, hereinafter Chou).

Ground 3: Claims 1, 2, and 4 are unpatentable in light of Lai (US 2017/0314777 A1, hereinafter Lai) in combination with Fujitsu.

Ground 4: Claim 5 is unpatentable in light of Lai in combination with Fujitsu and Chou.

An order was mailed on July 18, 2024, finding that Grounds 1-4 above raised a substantial new question of patentability (SNQ). In a letter filed July 29, 2024, Patent Owner (PO) waived the right under 37 C.F.R. 1.530 to file a Patent Owner Statement.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 102(a)(1) and 102(a)(2) as anticipated by Lai or, in the alternative, under 35 U.S.C. 103 as obvious over Lai in view of Fujitsu.

Regarding **claim 1**, Lai discloses an illumination fan (LED fan 10, Fig. 3) connectible with at least one illumination fan (§ 12)¹, comprising: a body provided with a fan in a center of the body (*see* Fig. 3), an illumination area on at least two sides of the fan at a top of the body (at LEDs 16, Figs. 2 and 4-6; §§ 11 and 13-16), a power socket and a first connector (shown as input 111 in schematic view of Fig. 2, the power socket being the input power supply connection of the fan 10, and the first connector being any other of the input connections of the fan 10 for connecting the fan 10 to the controller 20 or to an adjacent fan 10, as shown in Figs. 4-6) on one side of the body (*i.e.*, on the side closest to the controller 20, Fig. 3), and a second connector (shown as output 112 in schematic view of Fig. 2, from the fan 10 to the next fan 10 in series, connected via transmission line 12 in Fig. 3; *see also* Figs. 4-6) on another side of the body (*i.e.*, on the side closest to the next fan 10 in the series, Fig. 3), wherein the power socket is electrically connected with the first connector, the second connector, the fan and the illumination area (*see* Figs. 2 and 4-5), such that when the power socket on the one side of the body is supplied with power, the fan and the illumination area of the body are respectively driven into rotation and illumination (§ 16), and when the first connector of the body is connected with a second connector of a body of another illumination fan (*i.e.*, when the input connectors of one fan are connected with the output connectors of the adjacent fan in the series, *e.g.*, via a transmission line 12, Fig. 3), a fan and an illumination area of the body of the other illumination fan are respectively driven into rotation and illumination (§ 16).

Although the schematic view of the fan shown in Fig. 2 of Lai illustrates the input (111) and the output connectors (112) on the same side of the fan body, the fan shown in Fig. 3 of Lai is understood to show the input and output connectors on opposite sides of the fan body, *e.g.*, for

¹ The preamble phrase “for a computer” describes an intended use of the claimed fan and does not further limit its structure. Therefore, the phrase “for a computer” is not a claim limitation. *See* MPEP § 2111.02, subsection II.

connection to a controller (20) on one side via a transmission line (13) and to another fan on another side via another transmission line (12), or for connection to one fan on one side via a first transmission line (12) and to another fan on the other side via a second transmission line (12). For that reason, Lai is understood to anticipate claim 1.

If there is any doubt regarding the examiner's interpretation of Lai as disclosing a power socket and a first connector on one side of the body and a second connector on another side of the body, then Fujitsu clearly discloses a fan (fan unit 10, Figs. 5-7) comprising: a body (fan unit 10) provided with a power socket (female power connector CNA and/or CNB, *see* ¶¶ 31 and 39) and a first connector (inter-fan connector CNC, ¶ 31) on one side of the body, and a second connector (inter-fan connector CND) on another side of the body. The power socket (CNA, CNB) is electrically connected with the first connector (CNC), the second connector (CND), a fan (11), and an illumination area (12; *see* Fig. 14). When the power socket (CNA, CNB) on the one side of the body is supplied with power, the fan (11) and the illumination area (12) of the body are respectively driven into rotation and illumination (*see* ¶¶ 27, 31, and 39-40). When the first connector (CNC) of the body is connected with the second connector (CND) of a body of another illumination fan, a fan (11) and an illumination area (12) of the body of the other illumination fan are respectively driven into rotation and illumination ("two adjacent fan units 10 among the plurality of fan units 10 are connected via inter-fan connectors CNC and CND that transmit the pulse signal from one end side to the other end side, and supplies power from one end side to the other end side," ¶ 31). Therefore, it would have been obvious to one of ordinary skill in the art to provide the body of Lai with a power socket and a first connector on one side of the body and a second connector on another side of the body, as taught by Fujitsu, in order to facilitate a serial arrangement of fans (as shown in Fig. 3 of Lai and Figs. 5-6 of Fujitsu).

Regarding **claim 2**, Lai or the modified Lai teaches the claimed invention substantially as claimed, as set forth above for claim 1. Lai further teaches an electrically conductive terminal (any one or more of the input nodes of fan 10 shown in Figs. 4-6) provided in the first connector, and an electrically conductive contact surface (any one or more of the output nodes of fan 10 shown in Figs. 4-6) is provided in the second connector for being electrically connected with the electrically conductive terminal (via transmission line 12, Fig. 3), 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 (via transmission line 12), the fan and the illumination area of the body of the other illumination fan are respectively driven into rotation and illumination (§ 16, such that the controller 20 connected to the first fan “can adjust each individual LED light on multiple LED fans while simultaneously control[ing] all fan speeds too”). One of ordinary skill in the art would clearly understand from the disclosure of Lai that the input and output nodes of the fan include an electrically conductive terminal and an electrically conductive contact surface, these being necessary components for transmitting the power and control signals (i.e., conducting electricity) to the multiple fans when connected in series.

Claim Rejections - 35 USC § 103

Claim 3 is rejected under 35 U.S.C. 103 as obvious over Lai, or Lai in view of Fujitsu.

Regarding **claim 3**, Lai or the modified Lai teaches the claimed invention substantially as claimed, as set forth above for claim 1. Lai does not explicitly teach that the illumination areas of two connected fan bodies form a continuous illumination area. However, the arrangement of the illumination areas is understood to be a matter of aesthetic design choice, there being no

objective evidence of record to indicate that the continuous configuration of the illumination areas serves any mechanical function. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify or further modify the invention of Lai by arranging the illumination areas in any desired aesthetic configuration, including a continuous illumination area (e.g., by extending the illuminated area to adjacent edges of the connected fans), in order to enhance the aesthetic appearance of the fans, since the courts have held that “matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention over the prior art.” *See* MPEP 2144.04, subsection I, citing *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

Claim 4 is rejected under 35 U.S.C. 103 as obvious over Lai in view of Fujitsu.

Regarding **claim 4**, Lai or the modified Lai teaches the claimed invention substantially as claimed, as set forth above for claim 1. Lai does not teach a groove and an engaging block for connecting the fan bodies. However, Fujitsu further teaches a groove (*i.e.*, the female socket of connector CND) is provided on one side of the body of the illumination fan, while an engaging block (*i.e.*, the projection of the connector CNC) is provided on another side thereof to be engaged into the groove (¶ 38), such that when the groove of the body of the illumination fan is engaged with the engaging block of the body of another illumination fan, the body of the illumination fan is connected with the body of the other illumination fan (¶ 38; *see* Figs. 5-6). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify or further modify the invention of Lai by providing a groove on one side of the body and an engaging block on another side of the body, as taught by Fujitsu, in order to facilitate a secure connection between adjacent fan bodies.

Claim 5 is rejected under 35 U.S.C. 103 as obvious over Lai, or Lai in view of Fujitsu, in further view of Chou.

Regarding **claim 5**, Lai or the modified Lai teaches the claimed invention substantially as claimed, as set forth above for claim 1. Lai does not teach a groove provided on two sides of the body and an engaging block. However, in the fan art, Chou discloses a fan body (Figs. 2 and 4) with a groove (sliding rail 246, Fig. 2; ¶ 22) on two sides of the body, configured such that the fan body can be connected with another fan body by respectively engaging an engaging block (connecting member 46; ¶ 26) with one of the grooves on the side of the fan body and one of the grooves on the side of the other fan body (*see* Fig. 4, the engaging block 46 engaging the sliding rails 246 of the pair of fans 4). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify or further modify the invention of Lai by providing a groove as taught by Chou on two sides of the body and connecting the body to the body of another illumination fan by respectively engaging an engaging block as taught by Chou with one of the grooves on the sides of the body of the illumination fan and one of the grooves on the sides of the body of the other illumination fan, in order to facilitate a secure connection of adjacent fans.

Claims 1-4 are rejected under 35 U.S.C. 103 as being unpatentable over Fujitsu in view of Tsai.

Regarding **claim 1**, Fujitsu discloses an illumination fan (fan unit 10, Figs. 5-7, illuminated at indicator lamp 12; *see* ¶¶ 25-26 and 40) connectable with at least one other illumination fan (*see* Figs. 5-6) for a computer (e.g., a server or other “electronic apparatus such as information processing device,” ¶ 25), comprising: a body (fan unit 10) provided with a fan

(cooling fan 11) in a center of the body (*see* Fig. 7; ¶27), an illumination area (indicator lamp 12, Fig. 7, ¶ 40), a power socket (female power connector CNA and/or CNB, *see* ¶¶ 31 and 39) and a first connector (inter-fan connector CNC, ¶ 31) on one side of the body, and a second connector (inter-fan connector CND) on another side of the body. The power socket (CNA, CNB) is electrically connected with the first connector (CNC), the second connector (CND), the fan (11), and the illumination area (12; *see* Fig. 14). When the power socket (CNA, CNB) on the one side of the body is supplied with power, the fan (11) and the illumination area (12) of the body are respectively driven into rotation and illumination (*see* ¶¶ 27, 31, and 39-40). When the first connector (CNC) of the body is connected with the second connector (CND) of a body of another illumination fan, a fan (11) and an illumination area (12) of the body of the other illumination fan are respectively driven into rotation and illumination (“two adjacent fan units 10 among the plurality of fan units 10 are connected via inter-fan connectors CNC and CND that transmit the pulse signal from one end side to the other end side, and supplies power from one end side to the other end side,” ¶ 31).

Fujitsu does not disclose that the illumination area is on at least two sides of the fan at the top of the body. However, in the art of illumination fans, Tsai teaches a fan body (Figs. 1-4) with a fan (motor 41 with blades 42) in a center of the body and an illumination area (translucent light-guiding ring 20, ¶ 34) on at least two sides of the fan (41, 42) at the top of the body (*see* Fig. 1, the illumination area defined by the annular light-guiding ring 20 surrounding the fan 41, 42 on all sides at the top of the body). Tsai teaches that this arrangement is advantageous for providing an attractive and colorful appearance to the fan (¶ 1-3). Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify the invention of Fujitsu by arranging the illumination area on at least two sides of the

fan at the top of the body, as taught by Tsai, in order to enhance the aesthetic appearance of the fan.

Regarding **claim 2**, the modified Fujitsu teaches the claimed invention substantially as claimed, as set forth above for claim 1. Fujitsu further discloses an electrically conductive terminal is provided in the first connector (CNC) and an electrically conductive contact surface is provided in the second connector (CND) for being electrically connected with the electrically conductive terminal (“a connector CNC (male) that enables power supply and live connection of the control signal/monitoring signal is provided by protruding on the right side surface ... A connector CND (female) that enables power supply and live connection of the control signal/monitoring signal is provided by recessing on the left side surface ... Two adjacent fan units 10 are connected so as to enable power supply and transmission of the control signal/monitoring signal by engaging the connector CNC of the fan unit 10 on one side and the connector CND of the fan unit 10 on the other end,” ¶ 38). One of ordinary skill in the art would clearly understand from the disclosure of Fujitsu that the connectors CNC, CND include an electrically conductive terminal and an electrically conductive contact surface, these being necessary components for enabling the power supply and transmitting the control signal (i.e., conducting electricity) to multiple fans connected in series.

Regarding **claim 3**, the modified Fujitsu teaches the claimed invention substantially as claimed, as set forth above for claim 1. The annular illumination area taught by Tsai extends to the outer periphery of the fan (*see* light-guiding ring 20 of Tsai, Fig. 1). Thus, when the fan bodies of Fujitsu are modified to include illumination areas in the configuration taught by Tsai, the illumination areas of two connected fan bodies will form a continuous illumination area due

to the immediate proximity of the two illumination areas at the adjacent outer peripheries of the two fan bodies.

Regarding **claim 4**, the modified Fujitsu teaches the claimed invention substantially as claimed, as set forth above for claim 1. Fujitsu further teaches a groove (*i.e.*, the female socket of connector CND) is provided on one side of the body of the illumination fan, while an engaging block (*i.e.*, the projection of the connector CNC) is provided on another side thereof to be engaged into the groove (§ 38), such that when the groove of the body of the illumination fan is engaged with the engaging block of the body of another illumination fan, the body of the illumination fan is connected with the body of the other illumination fan (§ 38; *see* Figs. 5-6).

Claim 5 is rejected under 35 U.S.C. 103 as being unpatentable over Fujitsu in view of Tsai, in further view of Chou.

Regarding **claim 5**, the modified Fujitsu teaches the claimed invention substantially as claimed, as set forth above for claim 1. Fujitsu and Tsai do not teach a groove provided on two sides of the body and the body being connected with the body of another illumination fan by respectively engaging an engaging block with one of the grooves on the sides of the body of the illumination fan and one of the grooves on the sides of the body of the other illumination fan. Fujitsu discloses that the two fans, connected as discussed above for claim 1, are supported in the computer casing in a sliding arrangement (*see* Figs. 5-6 and § 36), but Fujitsu is silent with respect to the structure for accomplishing this function. However, in the fan art, Chou discloses a fan body (Figs. 2 and 4) with a groove (sliding rail 246, Fig. 2; § 22) on two sides of the body, configured such that the fan body can be connected with another fan body by respectively engaging an engaging block (connecting member 46; § 26) with one of the grooves on the side of

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the fan body and one of the grooves on the side of the other fan body (*see* Fig. 4, the engaging block 46 sliding along the sliding rails 246 of the pair of fans 4). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to further modify the invention of Fujitsu by providing a groove as taught by Chou on two sides of the body and connecting the body to the body of another illumination fan by respectively engaging an engaging block as taught by Chou with one of the grooves on the sides of the body of the illumination fan and one of the grooves on the sides of the body of the other illumination fan, in order to support the connected fans as the fans are slid into and out of the computer casing.

Conclusion

All correspondence relating to this *ex parte* reexamination proceeding should be directed as follows:

By E-filing: Registered users may submit via the Patent Center,
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For Patent Center transmissions, 37 CFR 1.8(a)(1) (i)(C) and (ii) states that correspondence (except for a request for reexamination and a corrected or replacement request for reexamination) will be considered timely filed if: (a) it is transmitted via the Office's electronic filing system in accordance with 37 CFR 1.6(a)(4); and, (b) includes a certificate of transmission for each piece of correspondence stating the date of transmission, which is prior to the expiration of the set period of time in the Office action.

Any inquiry concerning the status of this proceeding, should be directed to the Central Reexamination Unit (CRU) at telephone number: (571) 272-7705. The CRU's fax number is: (571) 273-9900. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA L DAVISON whose telephone number is (571) 270-0189. The examiner can normally be reached Monday - Friday, 8:00 a.m. - 4:00 p.m. ET.

/Laura Davison/
Reexamination Specialist, Art Unit 3993

Conferees:

/JOSHUA KADING/
Reexamination Specialist, Art Unit 3993

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SPRS, Art Unit 3993