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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte VOLKER BARNHART VERSCHOOR,
ROBERT SJANG JOSINE VAN DIJK,
MICHAEL JOHANNES ANNA MARIA WALTERS,
JOHANNES HERMANUS VAN DEN TILLAAR,
JOHANNES CORNELIS ADRIAAN HAMERS, and
PETRUS JOHANNES GERARDUS VAN LIESHOUT

Appeal 2020-004897
Application 15/655,649
Patent US 9,086,850 B2
Technology Center 3900

Before MICHELLE R. OSINSKI, JILL D. HILL, and
CYNTHIA L. MURPHY, *Administrative Patent Judges*.

OSINSKI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The above-identified application seeks reissue of US 9,086,850 B2.
Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Samsung Electronics Co., Ltd. Appeal Br. 2.

rejecting claims 1–14 in this reissue application. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

THE CLAIMED SUBJECT MATTER

Claims 1 and 11 are independent. Claim 1 is reproduced below. Bracketed material indicative of deletions from, and underlining indicative of additions to, previous versions of the claims have been removed for ease of reading.

1. A display system comprising:
 - a continuous flexible display;
 - a support frame comprising two main display supports being hingeable with respect to each other and each structurally configured to support a respective portion of the flexible display, a segment of the flexible display being located between the respective portions, wherein the two main display supports are hingeable between a closed configuration for fixing the flexible display in a storage position and an open configuration for fixing the flexible display in an open position; and
 - at least one additional display support arranged to physically contact and support the segment of the flexible display in the storage position of the flexible display, and to physically contact the segment of the flexible display in the open position of the flexible display,
 - wherein the two main display supports are hinged to the at least one additional display support,
 - wherein, in the storage position of the flexible display, the at least one additional display support constrains curvature of the segment to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display.

Appeal Br. 39 (Claims App.).

EVIDENCE

The Examiner relied on the following evidence in rejecting the claims on appeal:

Kimmel	US 7,714,801 B2	May 11, 2010
Ma	US 8,228,667 B2	July 24, 2012
Kao	US 8,385,055 B2	Feb. 26, 2013

THE REJECTIONS

- I. Claims 1–14 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 2–5.
- II. Claims 1–10² stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. *Id.* at 5–6.
- III. Claims 1, 3, 4, and 7–12 stand rejected under 35 U.S.C. § 102(e) as anticipated by Ma. *Id.* at 8–9.
- IV. Claims 1–8 and 10–14 stand rejected under 35 U.S.C. § 102(a/e) as anticipated by Kao. *Id.* at 9–11.
- V. Claims 1, 3–6, and 9–14 stand rejected under 35 U.S.C. § 102(b) as anticipated by Kimmel. *Id.* at 11–13.

² The Examiner clarified that “[t]he prosecution history indicates that the listing of claim 11 in the formal rejection statement of the August 2019 Office [A]ction was inadvertently made in error” and also that “the identification of claims ‘12–14’ at page 6 of the August 2019 Office [A]ction was improper because those claims do not depend from claim 1.” Ans. 3–4. The Answer is clear that only claims 1–10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. *Id.* at 7–8.

OPINION

Rejection I

Claim 1 and its Dependent Claims

Independent claim 1 recites, in relevant part, that “the two main display supports are hingeable between a closed configuration for fixing the flexible display in a storage position and an open configuration for fixing the flexible display in an open position” and “at least one additional display support arranged to physically contact and support the segment of the flexible display in the storage position of the flexible display, and to physically contact the segment of the flexible display in the open position of the flexible display.” Final Act. 3 (quoting Appeal Br. 39 (Claims App.)). The Examiner finds that “no hinge connection consistent with claim 1 is evident” when looking at Figs. 4a–d (depicting the elected embodiment “to which the claims shall be restricted”). *Id.* at 4, 3. The Examiner takes the position that even though the Specification “state[s] that supports 4, 5 are connected by hinges 6, 7, . . . such connection is not illustrated in Figs. 4a–4d beyond the generalized depiction of circles.” *Id.* at 4.

Appellant responds that the portion of the Specification identified by the Examiner and as set forth in column 3, line 60 to column 4, line 11 of the Specification adequately supports the identified claim limitations. Appeal Br. 8–9. Appellant further responds that “a more detailed illustration is not required to demonstrate possession of the invention” because “the artisan of ordinary skill would have been well-apprised of both the structure of a ‘hinge’ and the nature of elements ‘hinged’ together.” *Id.* at 10–11 (emphasis omitted). Appellant additionally responds that as to any

purported failure of the claims to “identify a particular structural arrangement, [or] reasonably convey a particular structural arrangement,” this “is properly a question of enablement, not possession under written description.” *Id.* at 11–12.

The Examiner replies that even if a type of hinge is known that would “connect . . . supports 4 and 8 together” and “connect . . . supports 5 and 8 together,” “such a hinged arrangement would not allow for the necessary translation of all the relevant parts making-up the display system.” Ans. 14–15. The Examiner takes the position that “the patent statute is not satisfied where the skilled artisan must rely upon subject matter that is conventional in the art, and also must determine a working solution to achieve a claimed result” in order to arrive at “the inventive subject matter of the claims.” *Id.* at 15–16 (emphasis omitted).

We determine that Appellant has the better position. The claim does not recite any particular structure for the hinge, so the Specification is not required to describe any such particular structure for the hinge. The claim merely recites the function of hinging together two display supports, and that these two display supports are hinged to an additional display support. Given the nature of the described function, we are persuaded that the disclosure of the Specification is sufficient to support that Appellant was in possession of the claimed invention. That is, the textual disclosure reasonably conveys to one having ordinary skill in the art, as of the filing date, that Appellant possessed the subject matter of “the two main display supports are hingeable between a closed configuration for fixing the flexible display in a storage position and an open configuration for fixing the flexible

display in an open position” and “at least one additional display support arranged to physically contact and support the segment of the flexible display in the storage position of the flexible display, and to physically contact the segment of the flexible display in the open position of the flexible display.” Appeal Br. 39 (Claims App.). *See Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Thus, we do not sustain the rejection of claim 1 and its dependent claims as failing to comply with the written description requirement on this basis.

Claim 11 and its Dependent Claims

Claim 11 recites, in relevant part, “a space for constraining a curvature radius of the flexible display to a predefined curvature radius.” Final Act. 4 (quoting Appeal Br. 42 (Claims App.)). The Examiner finds that the description in the Specification of “between the main display supports 4, 5 there is sufficient free space for enabling a partial curvature of the display segment 3a without conflicting with the respective main display supports” and “the additional display support 8 constrains with its support surface 8a the display segment 3a in order to prevent a radius of the curvature which is too small” (Spec. 4:12–18) “does not appear to be reconcilable with Fig. 4b, wherein the main display supports (4, 5) and the additional display support (8) are unconnected, which would seemingly render support 8 incapable of constraining the display segment (3a).” Final Act. 4 (citing Spec. 4:15–32).

Appellant responds that in light of the disclosure in the Specification at column 4, lines 12–32, “the artisan of ordinary skill would have understood that the inventor was in possession of the limitations of

claim 11.” Appeal Br. 13–14. Appellant further responds that “a more detailed illustration is not required to demonstrate possession of the invention” and that the Examiner’s concerns regarding whether the Specification “teaches the skilled artisan how to implement a limitation . . . is properly a questions of enablement, not possession under written description.” *Id.* at 15.

The Examiner replies that the passage of the Specification identified in the Appeal Brief “indicate[s] that, in order to create the partial curvature of the flexible display 3 when it is moved between the open and closed positions, the additional support 8 must form a bridge that pushes against the flexible display,” but there is no clear structural arrangement disclosed that would allow additional support 8 to “provide that pushing bridge” that is required in the Specification. Ans. 16–17.

Again, we determine that Appellant has the better position. Although the Figures do not illustrate main display supports 4, 5 connected with additional support 8 (Final Act. 4), claim 11 itself recites “a first hinge connecting the first display support to the third display support . . . and a second hinge connecting the second display support to the third display support” (Appeal Br. 42 (Claims App.)), such that there is a recited structural arrangement (e.g., the connection between the three display supports 4, 5, 8) that would allow for additional support 8 to serve as a bridge that pushes against the flexible display. The disclosure at column 4, lines 12–32 identified by Appellant is sufficient to support that Appellant was in possession of the claimed invention. That is, the disclosure reasonably conveys to one having ordinary skill in the art, as of the filing

date, that Appellant possessed the subject matter of “a space for constraining a curvature radius of the flexible display to a predefined curvature radius.” Appeal Br. 42 (Claims App.). Thus, we do not sustain the rejection of claim 11 and its dependent claims as failing to comply with the written description requirement on this basis.

Rejection II

The Examiner finds that “[c]laim 1 is unclear as to the metes and bounds associated with the new terminology ‘constrains curvature of the segment to a predefined curvature.’” Final Act. 5. More particularly, the Examiner finds that the “word ‘constrains’ would imply positive physical engagement, as opposed to mere structural capability . . . [b]ut, there is not a connection between parts positively recited in claim 1 such that the physical engagement would include a boundary.” *Id.* (footnote omitted).

Appellant responds that “the [S]pecification apprises the skilled artisan with reasonable clarity . . . as to the constrained nature of the elements recited in claim 1.” Appeal Br. 17 (referring to Specification 4:12–32). Appellant further responds that the Specification “employs the term ‘constrain’ in an ordinary manner, [and] the artisan of ordinary skill would have understood the plain meaning thereof.” *Id.* at 18.

“[A] claim is indefinite when it contains words or phrases whose meaning is unclear.” *In re Packard*, 751 F.3d 1307, 1322 (Fed. Cir. 2014). (citing MPEP § 2173.05(e)); *see also Ex parte McAward*, Appeal 2015-006416, 2017 WL 3669566, at *5 (PTAB Aug. 25, 2017) (precedential) (adopting the approach for assessing indefiniteness approved by the Federal Circuit in *Packard*). As set forth in the Specification, main display supports

4, 5 are connected via hinges in a hinge part, where the hinge part “also work[s] as an additional display support 8.” Spec. 3:66–4:3. The Specification also explains that the free space between main display supports 4, 5 enables a partial curvature of display segment 3a without conflicting with main display supports 4, 5, and that additional display surface 8 constrains display segment 3a in order to prevent a radius of curvature which is too small. *Id.* at 4:12–18. In accordance with the Specification, there is clearly a connection between display supports 4, 5, 8, as well as physical engagement between additional display support 8 and display segment 3a that results in constraining of the radius of curvature of display segment 3a as claimed.

We do not agree that the lack of an explicit recitation of a connection between the display supports in claim 1 renders the claim indefinite. The additional display support’s function of constraining the curvature of the segment of the flexible display to a predefined curvature is clear. Thus, we do not agree with the Examiner that the claim fails to define the metes and bounds of the invention with reasonable clarity. We do not sustain the rejection of claim 1, and claims 2–10 which depend therefrom, as indefinite.

Rejection III

The Examiner finds that Ma discloses all of the limitations of independent claim 1, including among other things, (i) “a support frame 202 including two main display supports 116, 118 . . . [that] are hingeable with respect to each other as indicated by Figs. 9 and 13, and are hinged to [an] additional display support 206” and (ii) “[t]he additional display support 206 constrains curvature of the display segment [which is located between

portions 24, 26 of flexible display 14, 152].” Final Act. 8 (citing Ma Figs. 9, 13; 5:61–6:8, 7:18–23). The Examiner takes the position that “the claimed ‘critical radius’ feature is considered to be satisfied because Ma depicts a circular curvature of the display segment in the closed or storage position of the support frame 202.” *Id.* (citing Ma Fig. 9); *see also* Ans. 19 (citing Ma Figs. 9, 13) (the Examiner finding that third supporting layer 206 is in contact with flexible display 14 in both the open and closed positions and the flexible display exhibits a circular curvature in support of a determination that Ma’s additional display support 206 is necessarily capable of performing the claimed function of “constrain[ing] curvature of the segment [of the flexible display] to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display,” as claimed).

Appellant argues that “Ma does not . . . disclose that the plurality of supporting layers (206) ‘constrain[] curvature of the segment to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the continuous flexible display,’ as recited in claim 1.”

Appeal Br. 20. Appellant argues that Ma merely discloses supporting layers 206 as providing supportive force. *Id.* (citing Ma 6:2–8, 5:61–63). Appellant contends that any assertion of support by supporting layers 206 “is at most speculation” and “[t]here is no constraint in the closed position in Ma.” Reply Br. 7.

Although features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d

1473, 1477-78 (Fed. Cir. 1997); *see also Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990) (“[A]pparatus claims cover what a device is, not what a device does”). Therefore, an apparatus of the prior art meets the recited functionally-defined limitation (here, “constrains curvature of the segment to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display”) if it is capable of the recited function. The prior art reference need not envision the device actually being used to perform the claimed function. *See Schreiber*, 128 F.3d at 1477 (“Although Schreiber is correct that [the prior art] Harz does not address the use of the disclosed structure to dispense popcorn, the absence of a disclosure relating to function does not defeat the Board’s finding of anticipation.”). “[C]hoosing to define an element functionally, i.e., by what it does, carries with it a risk.” *Id.* at 1478. This risk is that Appellant may bear the burden to prove that the prior art does not possess the functional characteristic.

Although we acknowledge Appellant’s observation that Ma does not explicitly disclose that third supporting layers 206 are used to constrain curvature of a segment of flexible display panel 14 (Appeal Br. 20–21), the lack of explicit recitation of the claimed function in the reference does not constitute evidence or persuasive argument to support that Ma’s prior art structure is incapable of performing the functionally defined limitation of the claimed apparatus, where the Examiner has provided reasoning to support a determination that the functionally defined limitation necessarily flows from the teachings of Ma.

Appellant also argues that the Examiner errs in considering Ma's supporting structure 202 as the claimed "support frame." Appeal Br. 21. More particularly, Appellant argues that "the supporting structure (202) is merely an example of 'supporting structure 52 . . . disposed between the main body 12 and the flexible display panel 14 . . . used for providing supporting force to the flexible display panel 14 when the cover portion 20 is rotated to the same horizontal surface where the connecting portion 18 and the body portion 16 are located.'" *Id.* at 21–22 (quoting Ma 3:58–63, 5:54–58). Appellant appears to take the position that main body 12, including body portion 16, connecting portion 18, and cover portion 20 forming containing space 22, is more properly considered the support frame. *Id.* at 21 (citing Ma 2:34–39). That main body 12 may also be considered a support frame does not provide persuasive argument as to why the Examiner is in error in considering first supporting layer 116, second supporting layer 118, and a plurality of third supporting layers 206 as the claimed support frame. The Examiner has explained how first supporting layer 116, second supporting layer 118, and a plurality of third supporting layers 206 meet the requirements of the claimed support frame (Final Act. 8), and Appellant has not identified any error in such explanation. Moreover, Ma explicitly describes supporting structure 202, encompassing elements 116, 118, 206, as providing a supporting force. Ma 3:58–4:4.

Appellant also argues that "Ma does not disclose that the first supporting layer (116) and the second supporting layer (118) are hingeable or hinged to the plurality of third supporting layers (206)." Appeal Br. 22. More particularly, Appellant argues that "Ma describes that the connecting

portion (108), body portion (106), and cover portion (110) are connected as to be pivoted and rotated (*e.g.*, via shafts 112, 114) between the open and closed configuration” (*id.* (citing Ma 6:19–24, 4:35–37, 52–56)), and that first supporting layer 116, second supporting layer 118, and plurality of third supporting layers 206 “simply rotate with the connecting portion (108), body portion (106), and cover portion (110) . . . owing to positioning thereof . . . between the device body and panel, but . . . are not themselves connected by hinges, hinged, or hingeable in any way” (*id.*). Appellant maintains that Figures 9 and 13 do not illustrate any hingeable configuration. *Id.* at 23.

An Examiner’s burden of proving unpatentability when rejecting claims in a patent application is by a preponderance of the evidence. *In re Caveney*, 761 F.2d 671, 674 (Fed. Cir. 1985). In order to satisfy this standard, the evidence must demonstrate that it is more likely than not that the alleged facts are actually true. *See Bosies v. Benedict*, 27 F.3d 539, 542 (Fed. Cir. 1994) (noting that the preponderance of the evidence standard “only requires the fact finder ‘to believe that the existence of a fact is more probable than its nonexistence.’” (quoting *In re Winship*, 397 U.S. 358, 371 (1970))). In our view, Ma discloses a hinge (*e.g.*, a movable joint which connected linked objects) by a preponderance of the evidence, when considering that additional display supports 206 form a curved configuration in which adjacent display supports remain connected at adjacent lower corner points (Ma Fig. 9), as well as a straight configuration in which additional display supports 206 abut each other (or supporting layer 116, 118) along the entirety of each adjacent side (*id.* Fig. 13).

For the foregoing reasons, Appellant does not apprise us of error in the Examiner's finding that Ma discloses all of the limitations of independent claim 1. Accordingly, we sustain the rejection of claim 1 under 35 U.S.C. § 102(e) as anticipated by Ma. We also sustain the rejection of claims 3, 4, and 7–12, for which Appellant relies on the same arguments and reasoning. Appeal Br. 23–27.

Rejection IV

The Examiner finds that Kao discloses all of the limitations of independent claim 1, including among other things, an “additional display support 113 [that] constrains the curvature of the display segment [at 113] . . . wherein the claimed ‘critical radius’ feature is considered to be satisfied because Kao depicts a circular curvature of the display segment in the closed or storage position of the support frame.” Final Act. 9–10 (citing Kao Fig. 1, 3:11–27); *see also* Ans. 22 (citing Kao Figs. 1–2) (the Examiner finding that bending mechanism 113, including arc-shaped connecting elements 1131, is in contact with flexible display 110 in both the open and closed/storage positions and flexible display 110 exhibits a semi-circular curvature at the fold/bend in support of a determination that Kao's bending mechanism 113, including arc-shaped connecting elements 1131, is necessarily capable of performing the claimed function of “constrain[ing] curvature of the segment [of the flexible display] to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display,” as claimed).

Appellant argues that “at most, Kao describes that the display panel (110) bends to cover the casing (140), and thus only the casing (140)

provides any means to ‘constrain[] curvature of the segment to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display,’ as claimed.” Appeal Br. 28; *see also* Reply Br. 8 (citing Kao 4:33–46) (Appellant asserting that “Kao does not . . . disclose that the connecting elements (1131) ‘in the storage position . . . constrain[] curvature of the segment,’ as recited in claim 1” and “at most, Kao describes that the display panel (110) bends to cover the casing (140).”).

Appellant also argues that “owing to the use of rollers (1132) connecting the arc-shaped connecting elements (1131), unlimited rotation is provided absent [the] presence of the casing (140).” Appeal Br. 29.

Although we acknowledge Appellant’s observation that Kao does not explicitly disclose that bending mechanism 113, including arc-shaped connecting elements 1131, is used to constrain curvature of a segment of flexible display (at 113) (Appeal Br. 28; Reply Br. 8), the lack of explicit recitation of the claimed function in the reference does not constitute evidence or persuasive argument to support that Kao’s prior art structure is incapable of performing the functionally defined limitation of the claimed apparatus, where the Examiner has provided reasoning to support a determination that the functionally defined limitation necessarily flows from the teachings of Kao.

To the extent that Appellant is arguing that rollers 1132 would allow unlimited rotation absent the presence of casing 140, thereby making Kao’s prior art structure incapable of performing the functionally defined limitation of the claimed apparatus (Appeal Br. 29), the Examiner responds that in the

embodiment of Figure 13, “the structural arrangement of the bumps 10131 and the mounting elements 10132 would restrict relative rotation, because each set of bumps/mounts is depicted as being restricted to about 90° of rotation (at least in the two-dimensional plane of the page)” and “[t]his disclosure in Kao is consistent with the viewing angle for the flexible display 110 that is illustrated in Fig. 4.” Ans. 24. Appellant does not respond with sufficient particularity to the position of the Examiner set forth in the Answer so as to persuade us of error in the Examiner’s finding that bending mechanism 113, including elements 1131, is capable of the claimed function of “constrain[ing] curvature of the segment [of the flexible display] to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display,” as claimed.

For the foregoing reasons, Appellant does not apprise us of error in the Examiner’s finding that Kao discloses all of the limitations of independent claim 1. Accordingly, we sustain the rejection of claim 1 under 35 U.S.C. § 102(a/e) as anticipated by Kao. We also sustain the rejection of claims 2–8 and 10–14 for which Appellant relies on the same arguments and reasoning. Appeal Br. 30–33.

Rejection V

The Examiner finds that Kimmel discloses all of the limitations of independent claim 1, including among other things, an “additional display support 5 [that] constrains the curvature of the display segment . . . wherein the claimed ‘critical radius’ feature is considered to be satisfied because Kimmel depicts a circular curvature of the display segment in the closed or storage position of the support frame 1.” Final Act. 12 (citing Kimmel

Fig. 1, 3:42–45); *see also* Ans. 24–25 (citing Kimmel Figs. 1–2) (the Examiner finding that “hinge structure 5 . . . is in contact with the flexible display 2 in both the open . . . and closed/storage . . . positions” and “the disclosed flexible display 2 exhibits a display area 2c . . . which is circular in shape” in support of a determination that Kimmel’s hinge 5 is necessarily capable of performing the claimed function of “constrain[ing] curvature of the segment [of the flexible display] to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display,” as claimed).

Appellant argues that “Kimmel fails to disclose the hinge (5), as well as parts (3, 4) supporting the display (2) . . . ‘in the storage position of the flexible display, the at least one additional display support constrains curvature of the segment to a predefined curvature having a radius which over an area of the curvature is larger than a critical radius for the flexible display,’ as claimed.” Appeal Br. 34 (citing Kimmel 3:30–37); *see also* Reply Br. 8 (quoting Kimmel 3:42–45) (Appellant arguing that “Kimmel does not . . . disclose that the hinge (5) ‘in the storage position . . . constrain[] curvature of the segment,’ as recited in claim 1,” that “at most, Kimmel describes that ‘a space for the display area 2c and the fold is arranged in the hinge 5 according to FIG. 1,’” and that “[t]here is no constraint of any kind by the hinge (5) disclosed in Kimmel.”).

Appellant also argues that Kimmel expressly discloses that “‘the central part of the display 2 can freely move to a curved position,’” rather than providing structure to constrain curvature of the segment to a predefined curvature. Appeal Br. 34 (quoting Kimmel 3:52–55).

Although we acknowledge Appellant's observation that Kimmel does not explicitly disclose that hinge 5 is used to constrain curvature of segment 2c of flexible display 2 (Appeal Br. 34; Reply Br. 8), the lack of explicit recitation of the claimed function in the reference does not constitute evidence or persuasive argument to support that Kimmel's prior art structure is incapable of performing the functionally defined limitation of the claimed apparatus, where the Examiner has provided reasoning to support a determination that the functionally defined limitation necessarily flows from the teachings of Kimmel.

As to Appellant's reference in Kimmel of the central part of display 2 being able to "freely move to a curved position" (Kimmel 3:53–55), we note that such discussion is in connection with the "embodiment according to FIG. 9" in which "the display 2 is attached to the device 1 in such a manner that it can move at least in the direction X of FIG. 9, and also in direction Y, if necessary" (*id.* at 3:48–51). Such disclosure is not in connection with the embodiment of Figs. 1–4 relied on by the Examiner in the articulated rejection, and as such, is not persuasive of error in the Examiner's rejection. *See* Final Act. 12.

For the foregoing reasons, Appellant does not apprise us of error in the Examiner's finding that Kimmel discloses all of the limitations of independent claim 1. Accordingly, we sustain the rejection of claim 1 under 35 U.S.C. § 102(a/e) as anticipated by Kao. We also sustain the rejection of claims 3–6 and 9–14 for which Appellant relies on the same arguments and reasoning. Appeal Br. 35–37.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-14	112, first paragraph	Written Description		1-14
1-10	112, second paragraph	Indefiniteness		1-10
1, 3, 4, 7-12	102(e)	Ma	1, 3, 4, 7-12	
1-8, 10-14	102(a/e)	Kao	1-8, 10-14	
1, 3-6, 9-14	102(b)	Kimmel	1, 3-6, 9-14	
Overall Outcome			1-14	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED