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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* IK-SANG LEE, SUNG-WON BAE, YEUNG-KI KIM,  
KWANG-JIN JEONG, and GUN-GUE PARK

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Appeal 2010-010019  
Application 11/512,102  
Technology Center 3700

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Before STEFAN STAICOVICI, MICHELLE R. OSINSKI, and  
HYUN J. JUNG, *Administrative Patent Judges*.

STAICOVICI, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Ik-Sang Lee *et al.* (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision finally rejecting claims 1-36. We have jurisdiction over this appeal under 35 U.S.C. § 6.

## THE INVENTION

Appellants' invention relates to a packing assembly including a plurality of packing modules for packing display modules. Spec. 1, paras. [0002] and [0003].

Claim 1 is illustrative of the claimed invention and reads as follows:

1. A packing module, comprising:
  - a seating unit adapted to seat at least one display module including a signal transmitting member and a chassis;
  - a first frame unit adapted to surround at least a portion of the at least one display module; and
  - a protection member arranged between the signal transmitting member of one of the at least one display module and the first frame unit and adapted to protect the signal transmitting member.

## THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Fletcher	US 4,823,952	Apr. 25, 1989
Kopf	US 4,872,723	Oct. 10, 1989
Murphy	US 5,103,976	Apr. 14, 1992
Thomas	US 6,227,372 B1	May 8, 2001
Nakazono	US 6,296,122 B1	Oct. 2, 2001

The following rejections are before us for review:

The Examiner rejected claims 3 and 4 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement<sup>1</sup>.

The Examiner rejected claims 1-23 under 35 U.S.C. § 112, second paragraph, for being indefinite.

The Examiner rejected claims 1-4, 6-8, 11-13, 15-21, 24-28, 31-33, and 36 under 35 U.S.C. § 102(b) as anticipated by Murphy.<sup>2</sup>

The Examiner rejected claims 22 and 23 under 35 U.S.C. § 103(a) as unpatentable over Murphy.

The Examiner rejected claim 5 under 35 U.S.C. § 103(a) as unpatentable over Murphy and Nakazono.

The Examiner rejected claims 9, 10, and 14 under 35 U.S.C. § 103(a) as unpatentable over Murphy and Thomas.

The Examiner rejected claims 29 and 30 under 35 U.S.C. § 103(a) as unpatentable over Murphy and Fletcher.

The Examiner rejected claims 34 and 35 under 35 U.S.C. § 103(a) as unpatentable over Murphy and Kopf.

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<sup>1</sup> The rejection of claim 20 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement appears to have been withdrawn by the Examiner. *Compare* Final Rejection, mailed October 5, 2009, at 2 with Ans. 2.

<sup>2</sup> Although claims 33 and 36 do not appear in the heading of this rejection, the Examiner addresses them in the body of the rejection. Ans. 7. Hence, for the purpose of this appeal, we consider the omission of claims 33 and 36 in the heading of this rejection as a mere typographical error on the part of the Examiner.

## SUMMARY OF DECISION

We AFFIRM-IN-PART.

### ANALYSIS

#### *The written description rejection*

The Examiner found that because Appellants' Drawings are not drawn to scale, the limitations of "wherein each of the plurality of protrusions has a height that is smaller than either a length and a width of the protrusion," as per claim 3, and "an opening having a size that corresponds to an entire display portion of one of the at least one display module," as per claim 4, are not supported by Appellants' original disclosure. Ans. 3 and 14.

It is well settled that the fundamental factual inquiry is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed. *See, e.g., Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). In this case, neither claim 3 nor claim 4 requires specific dimensions of the claimed protrusion or opening, respectively. Thus, although we appreciate that Appellants' Drawings are not drawn to scale, nonetheless, we agree with Appellants that Figure 3 of Appellants' Drawings shows that "the length and the width of each protrusion 111 is greater than the height." Br. 23. We further agree with Appellants that:

Because Appellants['] paragraph 0054 and claim 31 as originally filed states that the display area D of the display module can[]not come in contact with the anti-sliding layer 112 formed on seating unit 110 because of scratching and damaging the image producing display area D of the display . . . Appellants['] paragraph 0054 and claim 31 as originally filed supports the fact that the entirety of

the display area resides in the opening 110a of the seating unit.

Br. 24; *see also* Figure 7 of Appellants' Drawings.

Accordingly, for the foregoing reasons, we conclude that Appellants' Specification reasonably conveys to those skilled in the art that Appellants had possession of the subject matter of claims 3 and 4 as of the filing date of the present application. Therefore, we shall not sustain the rejection of claims 3 and 4 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.

*The indefiniteness rejection*

The Examiner found that the limitations "the signal transmitting member" and "the chassis" of "one of the at least one display module," as recited per claims 1, 15, 16, and 19, make it "unclear whether applicant[s] [are] intending to claim a combination of packing module and a display module or just the packing module." Ans. 3; *see also* Ans. 14.

The test for definiteness under 35 U.S.C. § 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations omitted). In this case, we agree with Appellants that the limitations mentioned *supra* are "defining the [claimed] packing module in terms of the workpiece (i.e., the display module)." Br. 25. We further agree with Appellants that the limitations "the signal transmitting member" and "the chassis" of "one of the at least one display module" merely further limit the claimed packing module. *Id.* Thus, we shall not sustain the indefiniteness

rejection of claims 1, 15, 16, and 19 under 35 U.S.C. § 112, second paragraph.

*The anticipation rejection based upon Murphy*

*Claim 1*

The Examiner found that template 80 of Murphy constitutes the claimed “protection member.” Ans. 4. Appellants argue that template 80 of Murphy does not constitute the claimed “protection member” because template 80: (1) “is removed and is not part of the final structure” and (2) “does not protect the IC chips 11 or their terminal pins 21 but is only used to guide the IC chips 11 and terminal pins 21 into their proper location within tray 10.” Br. 14. The Examiner responds that “[t]he template 80 of Murphy does not have to be part of the final structure to read on appellants[’] protection member.” Ans. 12. According to the Examiner, “template 80 is a member that is capable of protecting the tray or the display modules from being damaged from the top.” *Id.*

At the outset, we note that the limitation of “a protection member . . . adapted to protect the signal transmitting member,” as called for in independent claim 1, constitutes functional language as it describes the “intended use” of the protection member as opposed to a structural element of the protection member. *See* Ans. 11-12. It is well established that features of an apparatus may be recited either structurally or functionally, however, 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). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909

F.2d 1464, 1468 (Fed. Cir. 1990). Therefore, as long as template 80 of Murphy is capable of protecting the signal transmitting member, even temporarily, template 80 of Murphy meets the limitation of independent claim 1. In this case, because IC chips 11 are lowered through holes 86, 87 such that template 80 is positioned above IC chips 11, we agree with the Examiner that template 80 protects IC chips from being damaged from the top. *See* Ans. 12; *see also* Murphy, col. 8, ll. 24-33 and figs. 1 and 4. Moreover, although we appreciate that template 80 of Murphy is not part of the tray 10, nonetheless, because template 80 is capable of protecting IC chips 11, we agree with the Examiner that template 80 constitutes the claimed “protection member,” as called for in independent claim 1. As such, the rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by Murphy is sustained.

### *Claims 2 and 33*

Dependent claim 2 adds the limitation that “the seating unit comprises a plurality of protrusions, each of the protrusions comprises a flat top surface that mates with a portion of a non-display area of one of the at least one display module.” Br., Claims App’x. Pointing to Figures 2 and 4, the Examiner found that Murphy teaches protrusions 112 located on seating unit 50. Ans. 4, 12. The Examiner further noted that “each of the protrusions [112] . . . is capable of mating with a portion of a non[-]display area of one of the at least one display module.” Ans. 4. In contrast to the Examiner’s position, Appellants argue that, “ribs 112 of Murphy do not mate with or touch in any way the IC chips 11.” Br. 17.

Murphy teaches that the ends of vertically extending ribs 112 formed in beams 27 and 30 in each of pocket storage areas 36 and 41 are spaced from adjacent cross beams, “such as cross beam 32, the same distance as the distance between adjacent cross beams 32 and 33.” Murphy, col. 9, ll. 56-68. Thus, we agree with Appellants that, “ribs 112 are merely used to reduce the size of storage areas 36, 41, 42 and 46 so that they are of the same size as the other storage areas 37, 38, 40, 43, 44, and 45.” Br. 17; *see also* Murphy, col. 9, ll. 67-68 (“[T]he overall effective area for storing PGA components is the same for each storage pocket area.”). We could not find any portion in Murphy and the Examiner has not pointed to any portion that teaches any contact between ribs 112 and IC chips 11 (*see e.g.*, Murphy, fig. 4, which shows IC chip 17 positioned away from beam 30 with ribs 112 and capable of contacting upstanding ribs 51, 55, 56, 60, 61, and 57). Hence, because ribs 112 of Murphy are not capable of contacting IC chips 11, we do not agree with the Examiner’s position that “each of the protrusions [112] . . . is capable of mating with a portion of a non[-]display area of one of the at least one display module,” as called for by claim 2.

Accordingly, we do not sustain the anticipation rejection of claim 2 and its dependent claim 33.

### *Claim 3*

Dependent claim 3 adds the limitation that “each of the plurality of protrusions has a height that is smaller than either a length and a width of the protrusion.” Br., Claims App’x. Appellants argue that the Examiner “has never addressed the limitation of Appellants[’] claim 3.” Br. 17. In response, the Examiner takes the position that because “the original

specification didn't support these limitations and the drawings have not been indicated as being to scale, appellant[s] can not [sic] rely at this point on what is shown in the drawings in order to define over the applied art." Ans. 13.

We agree with Appellants that the Examiner has not made any findings with respect to the limitation that "each of the plurality of protrusions has a height that is smaller than either a length and a width of the protrusion," as called for by claim 3. Moreover, for the reasons set forth *supra*, we find that Appellants' Specification reasonably conveys to those skilled in the art that Appellants had possession of the subject matter of claim 3 as of the filing date of the present application. Therefore, for the foregoing reasons, we do not sustain the rejection of claim 3 as anticipated by Murphy.

#### *Claim 6*

Dependent claim 6 adds the limitation that "the first unit frame comprises a taper part adapted to guide one of the at least one display module on an inner surface of the first frame unit." Br., Claims App'x. The Examiner found that Murphy "discloses the first frame unit having a taper part defining slot 94 capable of guiding one display module on an inner surface of the first frame unit." Ans. 4. Appellants argue that slot 94 of Murphy "is merely to allow for the manual *removal* of the IC chips 11 by allowing an individual to grasp an edge of the IC chip more readily." Br. 19-20. The Examiner responds that "[i]f the prior art structure is capable of performing the intended use (i.e., guiding a display module) then it meets the claim." Ans. 13.

Although we appreciate the Examiner's position, nonetheless, we agree with Appellants that, "because there is no gradual inclined surface from frame edge down into the storage areas in Murphy," slot 94 of Murphy "is not and can not [sic] be used to guide an IC chip into place." Br. 20. Murphy specifically teaches that slots 94, 95 "enable an individual to grasp the edge of a PGA component more readily." Murphy, col. 8, ll. 41-42 and fig. 1. Moreover, in Murphy, IC chips 11 are positioned into tray 10 by being lowered through apertures 86, 87 of template 80. *Id.*, col. 8, ll. 24-33. Thus, because slots 94, 95 do not come into contact with IC chips 11 when positioning the chips into tray 10, we do not agree with the Examiner's position that slot 94 is capable of guiding one display module on an inner surface of the first frame unit, as called for by claim 6. Hence, we do not sustain the rejection of claim 6 under 35 U.S.C. § 102(b) as anticipated by Murphy.

*Claims 11 and 32*

Each of dependent claims 11 and 32 adds the limitation of "a second frame unit adapted to surround at least a portion of the first frame unit." Br., Claims App'x. The Examiner found that:

[T]he first frame unit of Murphy has been identified by the examiner as the frame that defines each storage pocket areas 36-38 and 40-46. These pocket areas are surrounded by a second frame 24 as shown in figure 1 and column 5, lines 57-67. The fact that the front beam 25 and rear beam 26 of Murphy are part of the second frame 24 doesn't prevent a portion of the beams from being part of the first frame units.

Ans. 13.

Appellants argue that because framework 24 of Murphy also defines pocket storage areas 36-38 and 40-46, framework 24 cannot constitute the claimed “second frame unit adapted to surround at least a portion of the first frame unit.” Br. 18. According to Appellants, “the same unit in Murphy can[-]not fairly be relied on for a teaching of two separate elements,” namely, a first frame unit and a second frame unit, as called for by claims 11 and 32. Br. 19.

Although we appreciate that framework 24 of Murphy also defines pocket storage areas 36-38 and 40-46, nonetheless, framework 24 does surround a portion of pocket storage areas 36-38 and 40-46, as called for by claims 11 and 32. Murphy specifically teaches that center beam 31 and intermediate center beams 32, 33, 34, and 35 partially surround pocket storage areas 36-38 and 40-46. Murphy, col. 5, l. 67 through col. 6, l. 6 and fig. 1. Murphy further teaches that framework 24 defines the periphery of tray 10. *Id.*, col. 5, ll. 61-67 and fig. 1. Thus, we agree with the Examiner that pocket storage areas 36-38 and 40-46, as defined by center beam 31 and intermediate center beams 32, 33, 34, and 35, constitute the claimed “first frame unit” and framework 24 constitutes the claimed “second frame unit.” *See* Ans. 13. Therefore, we sustain the anticipation rejection of claims 11 and 32.

### *Claim 18*

Dependent claim 18 adds the limitation that “the protection member comprises a plurality of fixing plates and the first frame unit comprises a plurality of fixing protrusions.” Br., Claims App’x. Appellants argue that, “template 80 in Murphy does not have any fixing plates” because “template

80 is never fixed to tray 10,” but merely “overlies a storage area within tray 10.” Br. 15.

We are not persuaded by Appellants’ arguments because we agree with the Examiner that “fingers 84-85 of Murphy read on appellant’s fixing plates.” Ans. 12. We further agree with the Examiner that in Figure 3 of Murphy, first frame unit defined by storage pocket areas 36-38 and 40-46 (*see* Ans. 13) includes a plurality of fixing protrusions. *Id.* Thus, the anticipation rejection of claim 18 is likewise sustained.

#### *Claim 20*

Dependent claim 20 adds the limitation of “an exhaust pipe fixing hole arranged at an end of the protection member to correspond to a corner of the seating unit.” Br., Claims App’x. Pointing to Figure 1 of Murphy, the Examiner found that Murphy teaches “an exhaust pipe fixing hole 86 arranged at an end of the protection member 80.” Ans. 5-6. According to the Examiner, “Figure 1 of Murphy clearly shows the hole 86 corresponding to a corner of the seating unit 50.” Ans. 14. Appellants argue that, “openings 86 and 87 of template 80 can not [sic] ever be at a corner of a base plate section [50].” Br. 20.

As noted *supra*, Murphy specifically teaches that IC chips 11 are positioned into tray 10 by being lowered through apertures 86, 87 of template 80. Murphy, col. 8, ll. 24-33 and fig. 1. Thus, we agree with Appellants that “openings 86 and 87 in template 80 will always correspond to a center of a base plate 50 and not to a corner as claimed by Appellant.” Br. 21. As such, we do not agree with the Examiner’s finding that “Figure 1 of Murphy clearly shows the hole 86 corresponding to a corner of the seating

unit 50.” Ans. 14. Accordingly, we do not sustain the anticipation rejection of claim 20.

*Claim 24*

The Examiner found that Murphy teaches display modules 20. Ans. 6. Appellants argue that, “reference numeral 20 in Murphy is an integrated circuit (IC) chip, not a display module.” Br. 13. According to Appellants, “[n]othing in Murphy discloses that the PGA IC 20 is a display module or that PGA IC 20 can display images.” *Id.*

We are not persuaded by Appellants’ arguments because although the claims are interpreted in light of the Specification, limitations from the Specification are not read into the claims. We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). In this case, we agree with the Examiner that a “display module” as described by Appellants’ Specification is not limited to a “display panel,” because it “can be a chassis itself.” Ans. 11; *see also* Spec. 1-2, para. [0003]. Thus, we agree with the Examiner that because the IC chips of Murphy “can be displayed, or display[] some information such as model or serial number or manufacturer,” the IC chips of Murphy constitute “a plurality of display modules,” as broadly claimed by independent claim 24. Ans. 11.

Appellants also argue that template 80 of Murphy does not constitute the claimed “protection member.” Br. 13-14. However, for the reasons set forth *supra*, we agree with the Examiner that template 80 constitutes the claimed “protection member,” as called for in independent claim 24.

In conclusion, for the foregoing reasons, the rejection of independent claim 24 under 35 U.S.C. § 102(b) as anticipated by Murphy is sustained.

*Claims 4, 7, 8, 12, 13, 15-17, 19, 21, 25-28, 31, and 36*

With respect to the rejection of claims 4, 7, 8, 12, 13, 15-17, 19, 21, 25-28, 31, and 36, Appellants do not make any separate arguments. Thus, we sustain the rejection of claims 4, 7, 8, 12, 13, 15-17, 19, 21, 25-28, 31, and 36 as anticipated by Murphy.

*The obviousness rejections*

Appellants rely on the same arguments as presented above with respect to the anticipation rejection of claims 1, 11, and 24. Br. 21-22. Thus, for the reasons set forth *supra*, the rejections under 35 U.S.C. § 103(a) of claims 22 and 23 as unpatentable over Murphy; of claim 5 as unpatentable over Murphy and Nakazono; of claims 9, 10, and 14 as unpatentable over Murphy and Thomas; of claims 29 and 30 as unpatentable over Murphy and Fletcher; and of claim 35 as unpatentable over Murphy and Kopf are likewise sustained.

With respect to claim 34, which depends from claim 2, the addition of Kopf does not remedy the deficiency of Murphy as described *supra*. Accordingly, we do not sustain the rejection of claim 34 under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Murphy and Kopf.

SUMMARY

The Examiner's decision is affirmed as to claims 1, 4, 5, 7-19, and 21-32, 35, and 36 and reversed as to claims 2, 3, 6, 20, 33, and 34.

Appeal 2010-010019  
Application 11/512,102

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

AFFIRMED-IN-PART

Klh