



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/555,289	07/23/2012	Robert S. Warnke	003026 P0004	5306
77093	7590	12/13/2016	EXAMINER	
Bishop Diehl & Lee, Ltd. 1475 East Woodfield Road, Suite 800 Schaumburg, IL 60173			GALLEG0, ANDRES F	
			ART UNIT	PAPER NUMBER
			3637	
			NOTIFICATION DATE	DELIVERY MODE
			12/13/2016	ELECTRONIC

**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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

cmarcello@bishoppatents.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* ROBERT S. WARNKE and STEVE VAN BERGEN

---

Appeal 2015-001491  
Application 13/555,289  
Technology Center 3600

---

Before JENNIFER D. BAHR, LINDA E. HORNER, and  
BRANDON J. WARNER, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Robert S. Warnke and Steve Van Bergen (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1–3, 5, 6, 8–14, 16–18, and 20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

## THE CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A furniture assembly comprising:
  - a substrate having two opposing surfaces and a passage there through which joins openings defined in each of the two opposing surfaces;
  - a base connected to the substrate and comprising:
    - a support for anchoring the base;
    - a substrate interface for contacting the substrate, wherein a connecting rod extends upward from a portion of the substrate interface; and
    - a stem connecting the substrate interface to the support;
  - at least one rubber support fixed to an upward facing surface of the substrate interface for frictionally engaging a downward facing surface of the substrate; and
  - a connector configured to threadably attach to the connecting rod extended from the substrate interface through the passage of the substrate after the substrate is positioned onto the substrate interface;wherein when the substrate is positioned on the base, the at least one rubber support prevents rotation of the substrate about the connecting rod, and an upper surface of the connector is substantially flush with an exposed upper surface of the substrate.

## REJECTIONS

- I. Claims 1–3, 5, 6, 8–14, 16–18, and 20 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.<sup>1</sup>

---

<sup>1</sup> Although the Examiner's statement of the rejection does not include claim 6, the Examiner explicitly addresses claim 6 in the detailed explanation of the rejection. Final Act. 4.

- II. Claims 1–3, 5, 8–12, 16–18, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Doty (US 2,602,012, iss. July 1, 1952), Kelley (US 4,779,543, iss. Oct. 25, 1988), and Cox (US 5,354,027, iss. Oct. 11, 1994).<sup>2</sup>
- III. Claim 6 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Doty, Kelley, Cox, and Park (US 6,516,731 B1, iss. Feb. 11, 2003).
- IV. Claims 13 and 14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Doty, Kelley, Cox, Park, and Anderson (US 4,807,838, iss. Feb. 28, 1989).

## DISCUSSION

### *Rejection I*

Appellants do not contest the indefiniteness rejections of claims 1–3, 5, 6, 8–14, 16–18, and 20. *See* Br. 4 (Appellants stating that they have “not presented any issues with these rejections to be resolved by the Board” because “these relatively new 112 rejections can be more easily addressed by Examiner amendment”). Consequently, Appellants have waived any argument of error, and we summarily sustain the rejection of claims 1–3, 5, 6, 8–14, 16–18, and 20 under 35 U.S.C. § 112, second paragraph, as being indefinite. *See In re Berger*, 279 F.3d 975, 984, 985 (Fed. Cir. 2002) (holding that the Board did not err in sustaining a rejection under 35 U.S.C.

---

<sup>2</sup> Although the Examiner does not include Cox in the statement of the rejection, the Examiner relies on Cox in the detailed explanation of the rejection. Final Act. 5, 6.

§ 112, second paragraph, when the applicant failed to contest the rejection on appeal).

### *Rejection II*

Appellants rely on the same arguments for patentability of independent claim 1 in contesting the rejection of independent claim 18. Br. 4–8. Appellants do not assert any separate arguments for patentability of dependent claims 2, 3, 5, 8–12, 16, 17, and 20. *Id.* We select claim 1 as representative, with claims 2, 3, 5, 8–12, 16–18, and 20 standing or falling therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner finds that Doty discloses a furniture assembly, substantially as claimed, including, in pertinent part, “a connector (plate 24 with socket 28) configured to threadably attach to the connecting rod . . . ; wherein[,] when the surface is connected to the base, an upper surface (top surface of plate 24) of the connector is substantially flush with an exposed upper surface of the substrate.” Final Act. 5. The Examiner acknowledges that Doty

does not disclose at least one rubber support fixed to an upward facing surface of the substrate interface for frictionally engaging a downward facing surface of the substrate; and wherein when the substrate is positioned on the base, the at least one rubber support prevents rotation of the substrate about the connecting rod.

*Id.* at 6. However, the Examiner finds that “Kelley teaches a rubber support (rubber brake pad 74) fixed to a downward facing surface of a substrate (board 14) for frictionally engaging an upward facing surface of a substrate interface (board 12), such that the rubber support prevents rotation of the substrate about a rod (shaft 70).” *Id.* (citing Kelley, Figs. 1–5). The

Examiner determines that it would have been obvious to one of ordinary skill in the art to modify the table assembly of Doty by fixing a rubber support, as taught by Kelley, to the upward facing surface of the substrate interface “since such a modification would reduce vibration between the two surfaces as taught by Cox.” *Id.* (citing Cox, col. 3, ll. 51–62). The Examiner also determines that it would have been obvious to one of ordinary skill in the art “to have the rubber support fixed to the upward facing surface of the substrate interface for frictionally engaging the downward facing surface of the substrate, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art.” *Id.*

Appellants argue that “neither Doty [n]or Kelley teaches or suggests the combination.” Br. 5. Appellants assert that, in “Doty, it is the leg 18 (or supporting member 44 with respect to FIG. 11) which is rotated relative to the table under surface to connect the screw end 32 into the socket 28 during assembly.” *Id.* According to Appellants, “Doty never suggests, teaches or even implies that the leg/support should be prevented from rotating,” and “there is no problem to be solved by the addition of rubber supports as allegedly taught by Kelley.” *Id.* at 6 (underlining omitted).

Appellants’ argument does not identify error in the Examiner’s rejection because it appears to insist upon an explicit teaching, suggestion, or motivation in the cited references to establish obviousness. The Supreme Court has stated that a rigid insistence on teaching, suggestion, or motivation is incompatible with its precedent concerning obviousness. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). The Court noted that an obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for [an examiner] can take

account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 418. Instead, the relevant inquiry is whether the Examiner has set forth “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (cited with approval in *KSR*, 550 U.S. at 418).

Here, the Examiner articulates adequate reasoning based on rational underpinnings as to why it would have been obvious to one of ordinary skill in the art to modify the table assembly of Doty such that the upward facing surface of the support interface includes at least one rubber support, as taught by Kelley. *See* Final Act. 6 (the Examiner explaining that “such a modification would reduce vibration between the two surfaces”) (citing Cox, col. 3, ll. 51–62). The Examiner also explains that Doty’s “screw 30 of member 44 has a spacer 34 used to prevent the top of the leg from marring the undersurface of the table top when the member is tightly secured against the table top.” Ans. 3 (citing Doty, Fig. 11); *see also* Doty, col. 2, ll. 46–48. According to the Examiner:

The prior art of Kelley in combination with Doty reinforces the concept of preventing the marring of a table structure by providing a rubber support on the upward facing surface of the leg that will prevent rotation of the leg by frictionally engaging the downward facing surface of the tabletop when the leg has been rotatably secured tightly to the tabletop in a similar manner to how the spacer 34 of Doty engages the tabletop when the member is tightly secured against the table top.

Ans. 3. Appellants do not offer any factual evidence or persuasive technical reasoning to refute the Examiner’s position or explain why the Examiner’s articulated reasoning is in error.

Appellants argue that “the addition of rubber supports as suggested by the Examiner would not be expected to be successful” because this modification “would prevent the leg in Doty from rotating, which is the primary purpose of the disclosed invention.” Br. 5 (underlining omitted). In particular, Appellants assert that “the table of Doty would not be capable of assembly if the leg/support were prevented from turning, as the recessed plate 24 is intentionally incapable of being turned.” *Id.* at 6; *see also id.* at 7 (Appellants asserting that Doty’s “plate 24 is recessed in all figures and would be incapable of turning, as it is square in all cases”).

Appellants do not persuade us that a person having ordinary skill in the art of table assemblies would not expect success in combining Kelley’s rubber brake pad with the table assembly of Doty. Namely, we see no reason why adding Kelley’s rubber support to the table assembly of Doty would necessarily prevent Doty’s leg from rotating relative to the table top for assembly. Appellants’ reliance on Doty’s figures as providing evidence that plate 24 is incapable of turning because it is square is unavailing because Doty discloses that, although “the plates illustrated are substantially square, they may be rectangular, *circular* or any desired shape.” Doty, col. 2, ll. 24–26 (emphasis added).

Further, Doty’s and Kelley’s teachings both are directed to table assemblies, and Kelley specifically teaches using a rubber brake pad to prevent rotational movement of a table top with respect to a base. In particular, Doty discloses that “plates **24** are provided with threaded sockets **28**” and that “[t]he tops of legs **18** are provided with concentrically positioned screws **30** which are threaded for engagement with sockets **28**.” *Id.*, col. 2, ll. 31–35. Doty also discloses that “[t]he relatively broad contact

surfaces of plates **24** enable the legs to be tightly screwed into sockets **28** and the tops of the legs to be held rigidly against the under surface of the table top.” *Id.*, col. 2, ll. 40–43. Kelley discloses that rubber brake pad **74** is secured to knurled disc **72**, which is threaded onto shaft **70**. *See* Kelley, col. 4, ll. 49–53; Figs. 13–15. Kelley also discloses that, “as each knurled disc **72** is rotated downwardly, it forces the respective brake pad **74** into contact with the upper surface of base board **12** and tightens the same thereon to prevent movement of drafting board **14** with respect to base board **12**.” *Id.*, col. 4, ll. 54–58.

Given these teachings, the Examiner’s proposed modification of Doty to add a rubber pad would only prevent Doty’s leg from rotating once leg screw **30** advances upward in socket **28** enough to sufficiently force the rubber pad at the top of leg **18** against the underside of the table top such that friction prevents further rotation. Consequently, a person having ordinary skill in the art of table assemblies would have had a reasonable expectation that Kelley’s rubber brake pad could successfully be combined with the table assembly of Doty to prevent rotation between the table top and leg once the threaded rod of the leg and the threaded connector are tightened together. Appellants have not set forth sufficiently persuasive technical reasoning or evidence to show that one of ordinary skill in the art would have doubted that Doty’s table assembly, as modified to include a rubber support, as taught by Kelley, would be capable of assembly.

Appellants add that claim 1 requires “a connector configured to threadably attach to the connecting rod extended from the substrate interface through the passage of the substrate after the substrate is positioned onto the substrate interface” and assert that “the plate **24** of Doty must be placed

within the recess before the legs are attached.” Br. 8. To the extent that Appellants’ argument suggests that claim 1 requires threading (i.e., rotation) of the connector after the substrate contacts the substrate interface, such an argument is not commensurate with the scope of claim 1. *See In re Self*, 671 F.2d 1344, 1348 (CCPA 1982) (limitations not appearing in the claims cannot be relied upon for patentability). Claim 1 only requires a threaded attachment between the connector and the connecting rod after placing the substrate on the substrate interface. The claim does not require that the connector be threaded (i.e., rotated) after placing the substrate on the substrate interface. Moreover, as noted above, although Doty illustrates square plates 24, Doty also discloses, as an alternative, circular plates, which would not be prevented from rotating after the table top is placed onto the legs. Doty, col. 2, ll. 24–26.

For the above reasons, Appellants’ arguments do not apprise us of error in the Examiner’s determination that the subject matter of claim 1 would have been obvious. Accordingly, we sustain the rejection of claim 1, and of claims 2, 3, 5, 8–12, 16–18, and 20 falling therewith, under 35 U.S.C. § 103(a) as unpatentable over Doty, Kelley, and Cox.

#### *Rejections III and IV*

In contesting the rejections of claims 6, 13, and 14 under 35 U.S.C. § 103(a), Appellants rely on the arguments, discussed *supra*, presented for patentability of independent claim 1, from which these claims depend. Br. 8. For the reasons discussed above, these arguments fail to apprise us of error in the rejection of claim 1 and, likewise, fail to apprise us of error in the rejections of claims 6, 13, and 14. Accordingly, we sustain the rejection

Appeal 2015-001491  
Application 13/555,289

of claim 6 as unpatentable over Doty, Kelley, Cox, and Park, and the rejection of claims 13 and 14 as unpatentable over Doty, Kelley, Cox, Park, and Anderson.

#### DECISION

The Examiner's decision rejecting claims 1–3, 5, 6, 8–14, 16–18, and 20 is affirmed.

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