



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

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
14/422,370 02/19/2015 Bernhard Scheuermann TRW(REPA)024198-US-PCT 2517

26294 7590 01/24/2019
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
1300 EAST NINTH STREET, SUITE 1700
CLEVELAND, OH 44114

EXAMINER

KIM, SANG K

ART UNIT PAPER NUMBER

3654

NOTIFICATION DATE DELIVERY MODE

01/24/2019

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):

docketing@tarolli.com
rkline@tarolli.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* BERNHARD SCHEUERMANN<sup>1</sup>

---

Appeal 2018-004388  
Application 14/422,370  
Technology Center 3600

---

Before MICHELLE R. OSINSKI, GEORGE R. HOSKINS, and  
JEFFREY A. STEPHENS, *Administrative Patent Judges*.

OSINSKI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 11–14, 16, 18–24, 26, and 28–30.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

<sup>1</sup> TRW Automotive GmbH (“Appellant”) is the Applicant as provided in 37 C.F.R. § 1.46 and is identified as the real party in interest. Appeal Br. 2.

<sup>2</sup> Claims 1–10 are cancelled. Appeal Br. 26 (Claims App.). Claims 15, 17, 25, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Final Act. 8.

### THE CLAIMED SUBJECT MATTER

Claims 11 and 23 are independent. Claim 11 is reproduced below.

11. A belt reel (10) for a belt retractor in a vehicle comprising a substantially cylindrical reel body (14) onto which a webbing (36) can be wound as well as comprising two flanges (16, 18) which are connected on axial end faces (20, 22) of the reel body (14) to be rotationally fixed to the latter,

wherein the reel body (14) is made of extrusion material and the flanges (16, 18) are molded parts which are connected to the reel body (14) by form fit and/or adhesive bonding,

and wherein cavities (30) extending in the axial direction through the entire reel body (14) are provided in the reel body (14).

### EVIDENCE

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

Takada	US 4,262,858	Apr. 21, 1981
Ernst	US 4,506,844	Mar. 26, 1985
Mori	US 4,623,104	Nov. 18, 1986
Klafke	US 2012/0001009 A1	Jan. 5, 2012

### THE REJECTIONS

- I. Claims 11–14, 16, and 18–22 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ernst and Mori. Final Act. 2–4.
- II. Claims 23, 24, 26, and 28–30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ernst, Mori, and Takada. *Id.* at 4–5.
- III. Claims 11–14, 16, and 18–22 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ernst and Klafke. *Id.* at 5–6.
- IV. Claims 23, 24, 26, and 28–30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ernst, Klafke, and Takada. *Id.* at 7–8.

OPINION

*Rejection I*

The Examiner finds that Ernst teaches, in relevant part, “one of [the] cavities (no reference number, apertures near 122, 124, 126 and a central slot extending across the entire shaft portion 22 . . .) extending in the axial direction through the entire reel body 22 are provided in the reel body 22.” Final Act. 3 (underlining omitted) (citing Ernst 6:1–10, Figs. 8–9). The Examiner clarifies that:

[s]ince the concept of making one of the cavities to extend in the axial direction through the entire reel body is already taught in Ernst . . . , it would have been obvious . . . to modify the apparatus of Ernst . . . and make other cavities to extend across the entire shaft portion, to show that there are many different ways to construct the belt reel for easier manufacturing, cost, and/or a design choice.

*Id.* at 9. The Examiner asserts that this would reduce manufacturing cost and complexity (i.e., by removing the reinforcing webs) “without breaking the shaft portion.” *Id.* at 9–10. The Examiner further clarifies in the Answer that:

Ernst shows that in another embodiment that a shaft member 144 that is extruded includes a slot 146 extending along its entire length (see [F]igure 10, and in column 6, lines 25–28). . . . Therefore, it would have been obvious to . . . make other cavities extend across the entire shaft portion (i.e., since Ernst shows another embodiment of having a slot to extend all the way through by extrusion, thus modify the apertures to extend across the entire reel body which would reduce the material cost and also easier manufacturing), to show that there are different ways to construct the belt reel for easier manufacturing, cost, and/or a design choice.

Ans. 4–5 (underlining omitted).

Appellant argues that the Examiner's reliance on a design choice rationale is improper. Appeal Br. 9–10. We do not find this argument persuasive in that the Examiner is not relying solely on a design choice rationale, but has also reasoned that removing the reinforcing webs would reduce manufacturing cost and complexity. Final Act. 9–10; Ans. 4–5.

Appellant next argues that “[t]he intended purpose of Ernst is to provide a safety belt emergency locking retractor for restraining an occupant.” Appeal Br. 10. Appellant asserts that “[d]ue to the fact that elements 132 of Ernst are identified as ‘reinforcing webs[,]’ it is clear that reinforcing webs 132 strengthen the shaft portion 22” and that “[i]f one were to remove the reinforcing webs 132, as proposed by the Examiner, the shaft portion 22 would undoubtedly be weakened.” *Id.* at 10–11. Appellant further asserts that “[t]he weakened arrangement of Ernst would no longer be able to withstand loads transferred from the safety belt during instances when rotation of the spool is blocked, thereby resulting in deformation (or complete breakage) of the shaft portion 22” and “this would result in the arrangement of Ernst being unsatisfactory for its intended purpose of restraining an occupant.” *Id.* at 11.

We are not persuaded by this argument because Appellant does not offer any evidence to support the position that any weakened arrangement of Ernst would be unable to withstand loads under certain circumstances. In this regard, Appellant's assertion amounts to nothing more than attorney argument unsupported by evidence, and, thus, is entitled to little, if any, weight. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (An attorney's arguments in a brief cannot take the place of evidence.). Nothing in the prior art teaches

that the proposed modification—i.e., to remove the reinforcing webs that would otherwise prevent the identified cavities from extending through the entire reel body in the axial direction—would have resulted in an inoperable device. *See In re Urbanski*, 809 F.3d 1237, 1244 (Fed. Cir. 2016) (“Nothing in the prior art teaches that the proposed modification would have resulted in an ‘inoperable’ process.”). On the record before us, we agree with the Examiner that one of ordinary skill in the art would not necessarily have been dissuaded from modifying Ernst to remove the reinforcing webs that would otherwise prevent the identified cavities from extending through the entire reel body in the axial direction in order to reduce manufacturing cost and complexity, even if that meant potentially weakening the device. Our reviewing court has recognized that a given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate any or all reasons to combine teachings. *See Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1165 (Fed. Cir. 2006) (explaining that if there are tradeoffs involved regarding features, such things do not necessarily prevent the proposed combination); *Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000) (“The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another.”). In sum, we are not persuaded that “there is no suggestion or motivation to modify Ernst as proposed by the Examiner” (Appeal Br. 11) as the Examiner has articulated a rationale based on reduced manufacturing cost and complexity.

We have also considered Appellant’s argument that “[w]ithout any evidence to support his assertion, the Examiner makes a conclusory statement that modifying the ‘apertures’ of Ernst to extend axially through an entire reel body would provide easier manufacturing, cost, and/or a design choice.” Appeal Br. 21. Appellant contends that “the Examiner cites no prior art nor provides any evidence that the proposed modification would affect these factors,” and “[t]hus, the Examiner has failed to provide the required explicit analysis having articulated reasoning with some rational underpinning.” *Id.* at 22.

To the extent Appellant is insisting on an explicit teaching, suggestion, or motivation in the prior art for the Examiner’s proposed modification, such an argument has been foreclosed by the Supreme Court. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 415, 419 (2007) (stating that a rigid insistence on teaching, suggestion, or motivation is incompatible with its precedent concerning obviousness). Moreover, the reasoning supporting the legal conclusion of obviousness need not come directly from any references. *See Perfect Web Tech., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009) (“while an analysis of obviousness always depends on evidence . . . it also may include recourse to logic, judgment, and common sense available to the person of ordinary skill that do not necessarily require explication in any reference”); *see also KSR*, 550 U.S. at 418 (“the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ”); *see also id.* at 419 (“The obviousness analysis cannot be

confined . . . by overemphasis on the importance of published articles and the explicit content of issued patents.”).

For the foregoing reasons, we do not find that the Examiner erred in concluding that the subject matter of independent claim 11 is rendered obvious by Ernst and Mori. We sustain the rejection of claim 11 under 35 U.S.C. § 103 as unpatentable over Ernst and Mori. We also sustain the rejection of claims 12–14, 16, and 18–22 for which Appellant appears to rely on the same arguments and reasoning we found unpersuasive in connection with independent claim 11.

### *Rejection II*

Independent claim 23 recites in relevant part, “flanges being rotationally fixed to the reel body by at least one of form fit and adhesive bonding.” Appeal Br. 28 (Claims App.). The Examiner concludes that it would have been obvious “to modify the apparatus of Ernst . . . into two separate pieces for the reel body and the flanges and connected *by form fit* as taught by Mori . . . to show that there are many different ways to construct the belt reel for easier manufacturing, cost, and/or a design choice.” Final Act. 4 (emphasis added). The Examiner acknowledges that Ernst and Mori do not “explicitly disclos[e] . . . the other means for connecting the reel body and flanges,” but turns to Takada for teaching “the concept of using an adhesive bonding or other suitable locking connection of the seatbelt casing.” *Id.* (citing Takada 4:40–45). The Examiner concludes that it would have been obvious “to provide other means . . . such as an adhesive bonding as taught by Takada . . . to provide an additional strength for fastening the seatbelt device and/or other ways to construct the fastening means since adhesive bonding is one of many fastening means.” *Id.*

Appellant initially relies on the same arguments and reasoning that we found unpersuasive in connection with Rejection I. Appeal Br. 13–14. For the same reasons discussed above, we are not persuaded by these arguments. Appellant also argues that “Takada does not discuss a connection between flanges and a reel body” because “[t]he connection in Takada referred to by the Examiner is an inertia-responsive actuating device.” *Id.* at 14–15. Appellant asserts that “one having ordinary skill in the art, when presented with the teachings of Takada, would not conclude that a belt reel and flanges can be connected in the manner recited in claim 23.” *Id.* at 15.

As an initial matter, claim 23 merely requires that the flanges be fixed to the reel body “by *at least one of* form fit and adhesive bonding.” Appeal Br. 28 (Claims App.) (emphasis added). Appellant has not identified error in the Examiner’s finding that Ernst/Mori would result in the flanges and reel body being connected by form fit (Final Act. 4), which is all that is required to satisfy the claim limitation.

Even assuming *arguendo* that claim 23 were to require *both* form fit and adhesive bonding, we are not persuaded that Takada’s disclosure of joining, by an adhesive, the upper casing and the bottom of an inertia-responsive device for locking a belt reel upon detection of vehicle acceleration would have failed to have led one of ordinary skill in the art to use adhesive bonding as “an additional strength for fastening the seatbelt device for the flanges and the reel body already having a form fit (i.e., taught by Mori . . .).” Ans. 10 (underlining omitted). Merely because Takada uses adhesive in connection with an *inertia-responsive actuating device* for a belt retractor, rather than in a *belt reel* for a belt retractor is not persuasive of error in the Examiner finding adhesive to be a “suitable locking connection”

(*id.* at 9) for other “parts of the seatbelt device” (*id.* at 10), especially where the Examiner proposes the use of the adhesive *in addition to* the form fit connection between the reel body and flanges.

For the foregoing reasons, we do not find that the Examiner erred in concluding that the subject matter of claim 23 is rendered obvious by Ernst, Mori, and Takada. We sustain the rejection of claim 23 under 35 U.S.C. § 103 as unpatentable over Ernst, Mori, and Takada. We also sustain the rejection of claims 24, 26, and 28–30 for which Appellant appears to rely on the same arguments and reasoning we found unpersuasive in connection with independent claim 23.

*Rejections III and IV*

Appellant relies on essentially the same arguments and reasoning that we found unpersuasive in connection with Rejections I and II. Appeal Br. 15–20. For similar reasons discussed above we are not persuaded by these arguments.

DECISION

The Examiner’s decision to reject claims 11–14, 16, and 18–22 under 35 U.S.C. § 103(a) as unpatentable over Ernst and Mori is affirmed.

The Examiner’s decision to reject claims 23, 24, 26, and 28–30 under 35 U.S.C. § 103(a) as unpatentable over Ernst, Mori, and Takada is affirmed.

The Examiner’s decision to reject claims 11–14, 16, and 18–22 under 35 U.S.C. § 103(a) as unpatentable over Ernst and Klafke is affirmed.

Appeal 2018-004388  
Application 14/422,370

The Examiner's decision to reject claims 23, 24, 26, and 28–30 under 35 U.S.C. § 103(a) as unpatentable over Ernst, Klafke, and Takada 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