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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/941,054	11/13/2015	David A. Szymanski	INDI 200005US01	9546
27885	7590	12/31/2019	EXAMINER	
FAY SHARPE LLP 1228 Euclid Avenue, 5th Floor The Halle Building Cleveland, OH 44115			CHOI, STEPHEN	
			ART UNIT	PAPER NUMBER
			3724	
			MAIL DATE	DELIVERY MODE
			12/31/2019	PAPER

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID A. SZYMANSKI

Appeal 2019-003754
Application 14/941,054
Technology Center 3700

Before JENNIFER D. BAHR, DANIEL S. SONG, and
BRANDON J. WARNER, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–12, 14, and 15.² We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM IN PART.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42.

² *See* 37 C.F.R. § 41.31(c) (“An appeal, when taken, is presumed to be taken from the rejection of all claims under rejection unless cancelled by an amendment filed by the applicant and entered by the Office”); *see* Appeal Br. 7 (requesting that the Board reverse the rejections of claims 1–12, 14, and 15).

CLAIMED SUBJECT MATTER

Appellant's invention is directed to a chain saw provided with structure designed "to reduce the problem of chain shot." Spec. ¶ 4. "Chain shot refers to what happens when a piece or pieces of a cutting chain separate from the end of a broken saw chain at a high-velocity." *Id.* ¶ 3. Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A saw chain comprised of at least one chain link selected from a cutting link and a drive link, at least one tie strap pair, said chain link and said tie strap pair defining a hole passing therethrough, a rivet disposed within said hole and joining said chain link and said tie strap pair, each tie strap of said tie strap pair having a wall defining said hole, said rivet comprising a central barrel region and two opposed flanges, said barrel region being received within a center bore of said hole, each of said flanges passing through a reduced diameter region of said hole formed by projections from [sic] the wall of each said tie strap pair such that internal edges of said projections cooperatively retain said barrel region, each of said tie strap pair further including a counter bore inward of said projection, an outer circumferential surface of said barrel region engaging the wall of the tie strap at said counter bore, each flange terminating in a head region, each head region engaging an external surface of said projections.

EVIDENCE

The prior art relied upon by the Examiner is:

Name	Reference	Date
Travis	US 5,729,882	Mar. 24, 1998
Osborne	US 2008/0110317 A1	May 15, 2008
Szymanski	US 2011/0120280 A1	May 26, 2011

REJECTIONS³

Claims 1–5, 9–12, 14, and 15 stand rejected under 35 U.S.C. § 102(a)(1) as anticipated by Travis.

Claim 6 stands rejected under 35 U.S.C. § 103 as unpatentable over Travis and Szymanski.

Claims 7 and 8 stand rejected under 35 U.S.C. § 103 as unpatentable over Travis and Osborne.

OPINION

Claims 1–3, 5–12, 14, and 15

Despite requesting that the Board reverse the rejections of claims 1–12, 14, and 15, Appellant does not present any substantive arguments contesting the rejections of claims 1–3, 5–12, 14, and 15 in the Appeal Brief or Reply Brief. *See* Appeal Br. 5–7; *id.* at 5 (expressly stating, “Appellant appeals the rejection of Claim 4.”). Accordingly, we summarily sustain the rejection of claims 1–3, 5, 9–12, 14, and 15 as anticipated by Travis; the rejection of claim 6 as unpatentable over Travis and Szymanski; and the rejection of claims 7 and 8 as unpatentable over Travis and Osborne.

See Hyatt v. Dudas, 551 F.3d 1307, 1314 (Fed. Cir. 2008) (explaining that summary affirmance without consideration of the substantive merits is appropriate where an appellant fails to contest a ground of rejection); Manual of Patent Examining Procedure (MPEP) § 1205.02 (9th ed.

³ We understand the Examiner’s indication in the Advisory Action that “Applicant’s reply has overcome the following rejection(s): 112” to mean that the Examiner has withdrawn both the rejection of claim 14 under 35 U.S.C. § 112(d) and the rejection of claims 8 and 14 under 35 U.S.C. § 112(b) set forth in the Final Action. *See* Advisory Act. 1; Final Act. 2–3.

rev. 08.2017 Jan. 2018) (“If a ground of rejection stated by the examiner is not addressed in the appellant’s brief, appellant has waived any challenge to that ground of rejection and the Board may summarily sustain it, unless the examiner subsequently withdrew the rejection in the examiner’s answer.”).

Claim 4

The Examiner provided an annotated copy of an “exploded” (i.e., enlarged) view of the pertinent portions of Travis’s Figure 3 (prior art), which the Examiner labels “Figure A,” to illustrate how the structure shown in Travis corresponds to the elements of claim 4, which depends from claim 1. Final Act. 5; *see id.* at 3–4, 6 (explaining the rejection of claim 4). The Examiner’s Figure A is reproduced below.

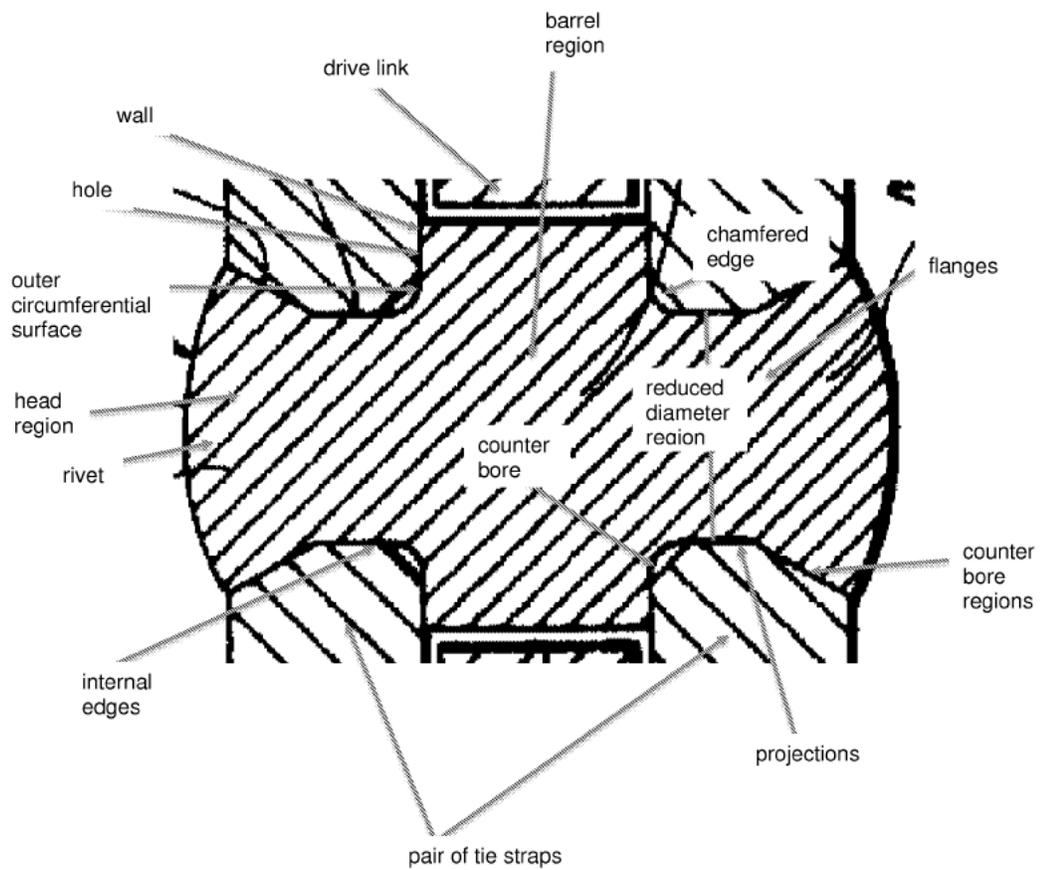


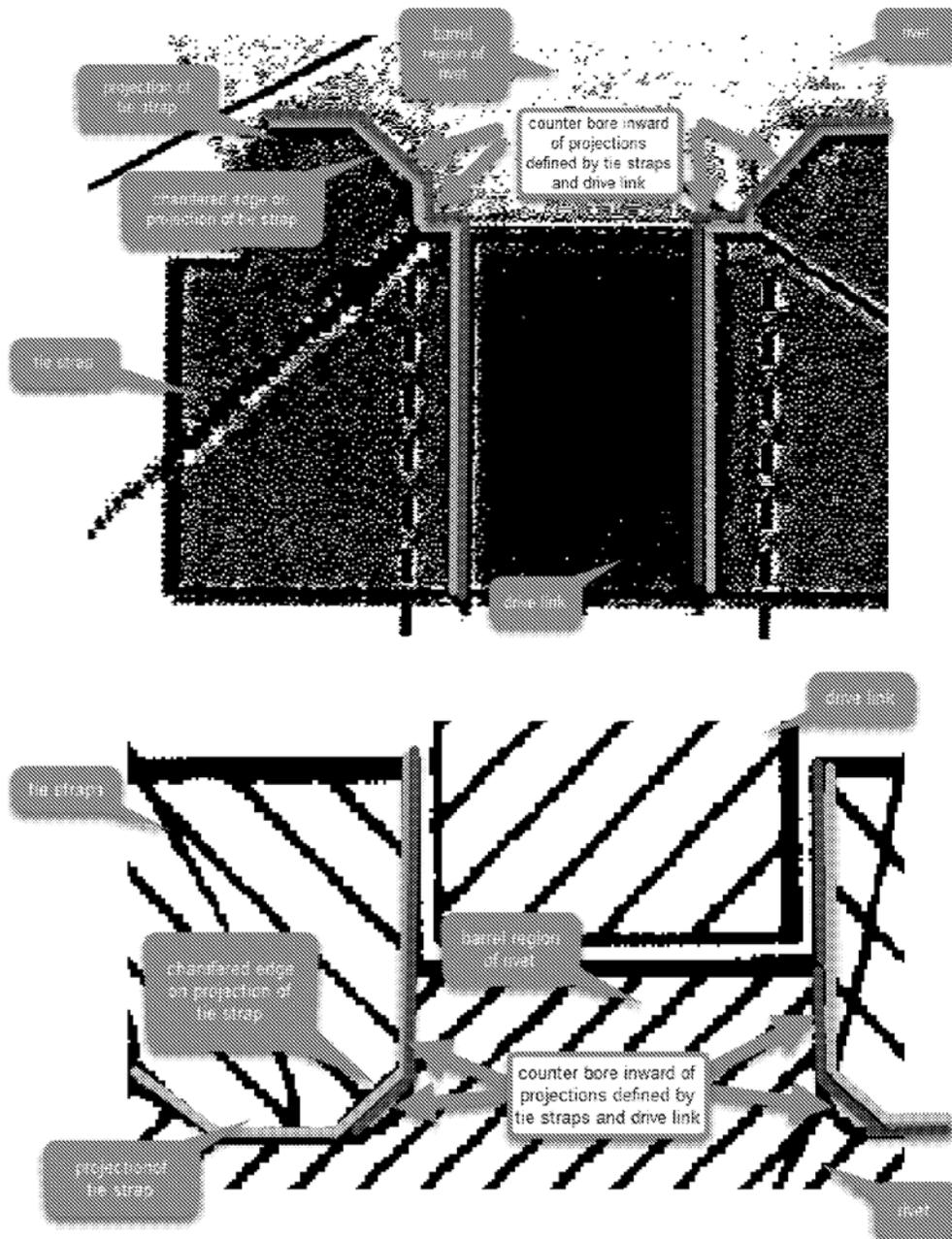
Figure A

Figure A is a longitudinal sectional view through a staked rivet interconnecting side and center links of a saw chain, and includes, in pertinent part, annotations, added by the Examiner, pointing to the structure which the Examiner finds corresponds to the claimed “projections,” “chamfered edge,” and “counter bore” of the tie straps, and the claimed “outer circumferential surface” of the “rivet.” *See* Travis 2:53–55; Final Act. 5.

Appellant argues that the Examiner’s Figure A “shows a counter bore and a chamfered edge as the same element of the tie strap projection.” Appeal Br. 5. More particularly, Appellant submits that the element pointed to by the Examiner as corresponding to both the chamfered edge and the counter bore “is a continuous bevel formed on the inner edge of the hole.” *Id.*

In response, the Examiner points out that “[t]he term ‘bore’ is defined as a hole in which is a hollow space,” and finds that “Travis clearly shows a hollow space inward of the projection as shown on a highlighted exploded annotated figure” provided on page 9 of the Answer. Ans. 8. According to the Examiner, the annotated figure provided on page 9 of the Answer shows both the claimed “chamfered edge” of the projections and the claimed “counter bore” disposed inward of the projections. *Id.*

The Examiner’s “highlighted exploded annotated figure,” which is a portion of Travis’s Figure 3 further enlarged relative to Figure A (reproduced above), is reproduced below (bottom figure), along with an enlarged annotated copy of a portion of Appellant’s Figure 1 (top figure), also provided on page 9 of the Answer.



The Examiner’s annotated portion of Appellant’s Figure 1 (top figure) “is a top view cutaway of a portion of a saw chain showing a tie strap and rivet design in accordance with [Appellant’s] disclosure,” with annotations to show, in pertinent part, the chamfered edge of the projection and the counter bore inward of the projection. Spec. ¶ 9; Ans. 9. The Examiner’s

annotated portion of Travis's Figure 3 (bottom figure) is an enlarged view thereof and includes annotations showing, in pertinent part, where the Examiner finds the "projection" of the tie strap, the "chamfered edge" of the projection, and the "counter bore" of the tie strap inward of the projection.

Ans. 9. In particular, the Examiner includes two lead lines purporting to identify the claimed "counter bore"; one of the lead lines points to a hollow space formed between the chamfered edge of the projection of the tie strap (side link 20) and the exterior face of the barrel (center section 3) of rivet 2 of Travis's Figure 3, and the other lead line points to the interior face of the tie strap (or the projection thereof) of Travis's Figure 3. *See id.*

It may be reasonable for the Examiner to consider the hollow space formed inward of, and bounded by the chamfered edge of the tie strap of Travis's Figure 3, to be a "bore" inward of the projection (*see* Ans. 8), or perhaps a *countersink* (i.e., a cone shaped hole) inward of the projection. However, claim 4, by virtue of its dependence from claim 1, specifically recites "a *counter bore* inward of the projection." Appeal Br. 8 (Claims App.) (emphasis added). The Examiner's finding that Travis shows a hollow space inward of the projection (Ans. 8) fails to address this distinction. A counter bore, in contrast to a countersink, is a flat-bottomed hole with its sides drilled straight down forming a cylindrical hole or hollow. *See, e.g.,* Counterbore: "[A] flat-bottomed enlargement of the mouth of a cylindrical bore." Merriam-Webster.com (accessed Dec. 30, 2019), <https://www.merriam-webster.com/dictionary/counterbore>; PCB Prime, What is the difference between a Countersink and a Counterbore? (accessed Dec. 30, 2019), <https://pcbprime.com/pcb-tips/countersink/>. Appellant's Figure 1 illustrates such a counter bore. *See* Ans. 9 (top drawing). Neither

the conical hollow space formed inward of the chamfered edge, nor the planar interior face of the tie strap, constitutes a “counter bore” as that term is conventionally understood in the art and as disclosed by Appellant.

Therefore, the Examiner’s finding that Travis discloses a tie strap including a projection having a chamfered edge and a “counter bore inward of said projection,” as required in claim 4, is not supported by a preponderance of the evidence.

Accordingly, we do not sustain the rejection of claim 4 as anticipated by Travis.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–5, 9–12, 14, 15	102(a)(1)	Travis	1–3, 5, 9–12, 14, 15	4
6	103	Travis, Szymanski	6	
7, 8	103	Travis, Osborne	7, 8	
Overall Outcome			1–3, 5–12, 14, 15	4

TIME PERIOD FOR RESPONSE

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 IN PART

Notice of References Cited	Application/Control No. 14/941,054	Applicant(s)/Patent Under Patent Appeal No. 2019-003754	
	Examiner	Art Unit 3724	Page 1 of 1

U.S. PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A US-			
	B US-			
	C US-			
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FOREIGN PATENT DOCUMENTS

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	N				
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NON-PATENT DOCUMENTS

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
U	Counterbore: “[A] flat-bottomed enlargement of the mouth of a cylindrical bore.” Merriam-Webster.com (accessed Dec. 30, 2019), https://www.merriam-webster.com/dictionary/counterbore .
V	PCB Prime, What is the difference between a Countersink and a Counterbore? (accessed Dec. 30, 2019), https://pcbprime.com/pcb-tips/countersink/ .
W	
X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



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coun·ter·bore | \ |kaüntə(r)+ \

Definition of *counterbore*

(Entry 1 of 2)

: to form a counterbore in : enlarge (part of a hole) by means of a counterbore

counterbore

noun

Definition of *counterbore* (Entry 2 of 2)

1 : a flat-bottomed enlargement of the mouth of a cylindrical bore

2 : a drill for making a counterbore — compare [countersink](#)

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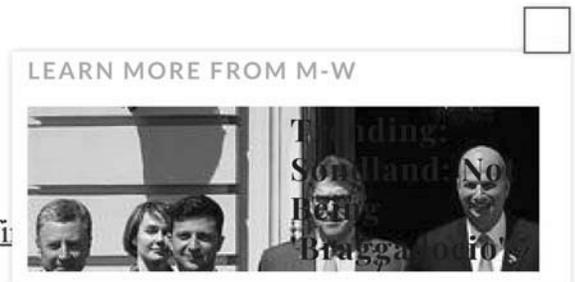
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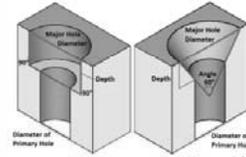
WHAT IS THE DIFFERENCE BETWEEN A COUNTERSINK AND A COUNTERBORE?

Countersinks and counterbores serve the same purpose, to allow the head of a screw or other fastener to lie flush with, or just below the surface of the material into which they are inserted. The difference between them is the angle at which the larger hole is drilled. A countersink's larger hole is tapered at an angle, whereas a counterbore is drilled straight into the material and leaves a flat bottom between the counterbore and the narrower inner shaft.

COUNTERBORE

The information needed for each type is almost identical with a few exceptions. A counterbore, by definition, is drilled straight down with no taper, so we don't need to know the angle.

- 1. On which side of the board is the bore? Top or Bottom?
2. Should the hole walls be plated or non-plated?
3. The finished diameter of the narrow inner shaft of the hole. (Primary Drill)
4. Major Diameter (Finished diameter of the hole at the surface)
5. Depth the counterbore is to be drilled



Counterbore
The larger hole is drilled straight into the material at a shallower depth than the smaller inner shaft. This leaves a flat bottom for the fastener to rest on.

Countersink
The larger hole is drilled at an angle, ideally to match the tapered angle of the fastener.



Counterbore bits



COUNTERSINK

Since a countersink is not drilled straight into the material, we need to know the intended angle. For all the math nerds out there, you've no doubt noticed the major hole diameter and the angle form a triangle. The depth the countersink will be drilled is predetermined by the angle, major and primary diameters, however listing your expected depth is a good reality check.

- 1. On which side of the board is the sink? Top or Bottom?



Countersink bits