



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.
15/703,405	09/13/2017	Stanislas BOULET D'AURIA	3X-004-A	7950
32954	7590	08/27/2020	EXAMINER	
JAMES C. LYDON P.O. Box 1406 North Springfield, VA 22151			NGUYEN, XUAN LAN T	
			ART UNIT	PAPER NUMBER
			3657	
			NOTIFICATION DATE	DELIVERY MODE
			08/27/2020	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):

jclydon@lydonipservices.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STANISLAS BOULET D’AURIA

Appeal 2019-005758
Application 15/703,405
Technology Center 3600

Before JENNIFER D. BAHR, MICHAEL J. FITZPATRICK, and
WILLIAM A. CAPP, *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 12 and 15–17. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as 3X Engineering. Appeal Br. 1.

CLAIMED SUBJECT MATTER

Appellant's invention is directed to "a device for protecting mechanical parts likely to be exposed to a force, friction or vibrations." Spec. 1:4-5. Claim 12, reproduced below, is representative of the claimed subject matter:

12. A system for bearing a pipeline, comprising
 - a support (20) for a pipe, and
 - a protective device (10) adapted to be placed between said support (20) and said pipe, wherein said protective device (10) comprises
 - a flexible area (12) including at least one woven layer, and
 - at least one row of rectilinear pads (14) in direct contact with said support, said row comprising a plurality of pads (14-1, 14-2, 14-3) made of a plastic material, which are rigidly connected to said flexible area and which are more rigid than said flexible area,
 - wherein said pads (14-1, 14-2, 14-3) are rectangular in shape, such that said pads (14-1, 14-2, 14-3) have a width between 10 and 30 mm, and a length between 10 mm and 30 mm.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Muszynski	US 5,069,255	Dec. 3, 1991
Obeshaw	US 6,821,638 B2	Nov. 23, 2004
Henderson	US 8,287,684 B2	Oct. 16, 2012

REJECTIONS

Claims 12 and 15 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Muszynski.

Claim 16 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Muszynski and Obeshaw.

Claim 17 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Muszynski and Henderson.

OPINION

Obviousness—Muszynski

The Examiner finds that Muszynski discloses a system for bearing a pipeline substantially as recited in claim 12, including, in pertinent part, a protective device (insulator 1) including at least one flexible area (belt 10) and at least one row of rectilinear pads (runners 20–34), wherein the pads (runners) are rectangular in shape and have a width of 25.4 mm, which falls within the claimed range of between 20 and 30 mm. Final Act. 2–3.

Muszynski discloses that, preferably, the runners are about 30.48 cm long, which is about ten times the 30 mm upper end of the pad length range recited in claim 1. Muszynski 3:64–67; Claims App. A-1. Muszynski teaches that the dimensions of the sheet and runners set forth at the bottom of column 3 “are preferred for the sake of economy of material and to allow the formed casing insulator [to] be used with a variety of pipe and casing sizes.” *Id.* 3:62–4:2. The Examiner notes that Muszynski teaches “that the system is to be cut to size in the field” and determines it would have been obvious “to have applied the teaching of Muszynski to cut the length of the system to between 10mm to 30mm in order to fit a certain pipe and support in the field.” Final Act. 3 (citing Muszynski 3:56–57).

Appellant notes that Muszynski “does not include any guidance as to how the dimensions of its pipeline casing insulator may be reduced or increased” and that “[t]here is no guidance given with respect to whether the

width, height or length, or some combination of dimensions, should be changed to accommodate a given pipe and casing combination.” Appeal Br. 8–9. In particular, Appellant submits that “there is no teaching or suggestion that the preferred length of Muszynski’s elongated runners should be reduced by 90% from 30.48 cm down to 3 cm.” *Id.* at 9 (underlining omitted).

Despite acknowledging that Muszynski does not provide specific guidance as to how the insulator would or should be cut in the field, Appellant asserts a Declaration by inventor Stanislas Boulet D’Auria dated July 20, 2019 (hereinafter “D’Auria Declaration” or “D’Auria Decl.”) in support of the contention that those skilled in the art would change the space between the runners or the width of the runners to adapt Muszynski’s insulator to a different pipe radius and would change the thickness of the runners to adapt the insulator to a different casing radius, but would not change the length of the runners to that claimed. Appeal Br. 10–12 (citing D’Auria Decl. ¶¶ 12, 13, 15–18). According to Appellant, “those skilled in the art would not change Muszynski’s elongated runners to the much shorter pads of the claimed system because such modification would eliminate an advantage of Muszynski’s casing insulator.” *Id.* at 11 (underlining omitted). In particular, Appellant contends that having elongated runners that are much longer than they are wide “helps efficiently wrap Muszynski’s flexible belt around the pipe’s outer surface because the elongated runner’s long length allows easy positioning of the flexible belt parallel to the pipe’s longitudinal axis” so “that no portion of the wrapped casing insulator overlaps itself.” *Id.* (underlining omitted); *see* D’Auria Decl. ¶ 15. Appellant also argues that shortening Muszynski’s runners to form pads with

dimensions as recited in claim 12 would cause Muszynski's belt to have "several possible bending directions rather than a single preferred bending direction," which "means the flexible belt could be positioned around the pipe in a different direction than parallel to the pipe's longitudinal axis, [such that] the wrapped belt would not perfectly cover the pipe's surface with no overlapping belt material." *Id.* at 11–12 (citing D'Auria Decl. ¶¶ 15–18).

Appellant's arguments, and the corresponding averments in the D'Auria Declaration, regarding the need to use runners that are significantly longer than they are wide in order to facilitate wrapping the belt around a pipe with runners extending parallel to the longitudinal axis of the pipe strike us as speculative. Muszynski gives no indication that wrapping the belt with the runners extending parallel to the pipe's longitudinal axis is critical to the operation of the insulator, nor does Muszynski mention any concern about a preferred bending direction or limiting the number of bending directions. The purpose of Muszynski's insulator is to "support[] a coated pipe within a tubular metallic casing to electrically insulate the pipe from the tubular casing and to prevent damage to the coated surface of the pipe when the pipe is installed within the casing." Muszynski 1:9–11. Muszynski's insulator performs this function by forming an intervening layer between the casing and the pipe to separate the pipe from the casing. Appellant does not persuasively explain why the runners must run perfectly parallel to the longitudinal axis to achieve this objective. Further, to the extent that extending Muszynski's runners parallel to the pipe's longitudinal axis is necessary to avoid interference with preferred bending directions, Appellant does not persuasively establish that proper positioning of the

insulators with the runners extending parallel to the pipe's longitudinal axis would be uniquely challenging to a person having ordinary skill in the art if the runners were shorter.

Appellant also fails to persuade us that runners having a length much longer than their width is necessary to facilitate wrapping Muszynski's belt around the pipe without overlapping of the material. A person having ordinary skill in the art would appreciate that Muszynski's belt could be cut along a direction parallel to the length of the runners (to reduce the 13.7 m length dimension of the belt) to match the circumference of the pipe about which it is to be wrapped. We do not find, and Appellant does not direct our attention to, any teaching in Muszynski that the belt can be cut in only one direction.

Moreover, the Examiner finds that Appellant has not established that the claimed length "is a critical aspect of the invention" or serves any stated purpose. Ans. 4. Appellant does not dispute this finding, nor does Appellant assert, much less offer objective evidence or persuasive technical reasoning to show, that the claimed dimensions (particularly the length) of the pads is critical or solves any stated problem. With respect to the dimensions of the pads, Appellant's Specification discloses that, "[i]n some embodiments, the pads have a width between 20 mm and 30 mm and a length between 10 mm and 30 mm" and that, "[a]ccording to particular embodiments of the invention, the pads . . . are rectangular and particularly square in shape." Spec. 2:18–19; 4:18–20. The Specification states that "[p]referably, the pads are between 5 mm and 10 mm thick, 20 mm to 30 mm wide and 10 mm to 30 mm long," but does not offer any reason for this preference or any suggestion as to why a square shape would be

important. *Id.* 4:20–21. In short, we do not find, nor does Appellant direct our attention to, any disclosure in Appellant’s Specification as to why the disclosed and claimed widths and lengths of the pads are critical or serve any stated purpose.

The following quotation from *In re Woodruff*, 919 F.2d 1575, 1578 (Fed. Cir. 1990), is applicable here:

The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. [citations omitted] These cases have consistently held that in such a situation, the applicant must show that the particular range is *critical*, generally by showing that the claimed range achieves unexpected results relative to the prior art range.

In this case, in failing to even allege, much less show, that the claimed range of pad length is critical, Appellant fails to establish a patentable distinction between the claimed system and Muszynski’s casing insulator. Thus, Appellant fails to apprise us of error in the Examiner’s conclusion that the subject matter of claim 12 would have been obvious. Accordingly, we sustain the rejection of claim 12, as well as claim 15, for which Appellant does not present any separate arguments, as unpatentable over Muszynski.

Obviousness—Muszynski and Obeshaw or Henderson

In contesting the rejections of claims 16 and 17, Appellant relies primarily on the arguments asserted against the rejection of claim 12 and submits that Obeshaw and Henderson do not remedy the purported deficiencies of Muszynski. Appeal Br. 14–15. For the reasons discussed above, Appellant’s arguments do not apprise us of error in the rejection of claim 12 and, likewise, fail to apprise us of error in the rejections of claims 16 and 17. Accordingly, we sustain the rejection of claim 16 as unpatentable

Appeal 2019-005758
Application 15/703,405

over Muszynski and Obeshaw and the rejection of claim 17 as unpatentable over Muszynski and Henderson.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
12, 15	103(a)	Muszynski	12, 15	
16	103(a)	Muszynski, Obeshaw	16	
17	103(a)	Muszynski, Henderson	17	
Overall Outcome			12, 15–17	

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