



# 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.
14/274,171	05/09/2014	Felix L. SORKIN	1101-356	2607
24106	7590	09/26/2019	EXAMINER	
Egbert Law Offices, PLLC 1001 Texas Ave., Suite 1250 HOUSTON, TX 77002			BELL, WILLIAM P	
			ART UNIT	PAPER NUMBER
			1745	
			NOTIFICATION DATE	DELIVERY MODE
			09/26/2019	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):

KMCDANIEL@EGBERTLAWOFFICES.COM  
MAIL@EGBERTLAWOFFICES.COM  
USPTO@dockettrak.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* FELIX L. SORKIN

---

Appeal 2019-000674  
Application 14/274,171  
Technology Center 1700

---

Before BEVERLY A. FRANKLIN, KAREN M. HASTINGS, and  
BRIAN D. RANGE, *Administrative Patent Judges*.

RANGE, *Administrative Patent Judge*.

DECISION ON APPEAL

SUMMARY

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner’s decision to reject claims 1–3, 6, 7, 11, 13, 14, and 16–18. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

<sup>1</sup> 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 Felix L. Sorkin. Appeal Br. 2.

## STATEMENT OF THE CASE<sup>2</sup>

Appellant describes the invention as relating to the process for forming profiled or radiused ducts having a particular curvature prior to the ducts' installation in concrete. Spec. ¶ 1. In particular, Appellant explains that tensioned steel cables may add strength to reinforced concrete and that ducts protect the cables from exposure to corrosive elements. *Id.* ¶¶ 5–8. Appellant explains that when a tendon is curved, it applies enormous tension load to the tendon and contact between the tendon and inner wall of the duct can hamper the system's integrity. *Id.* ¶ 17. Appellant thus describes providing the duct with a radiused or profiled shape before installation in order to avoid this problem. *Id.* ¶ 18. Claim 1, reproduced below with emphases added to certain key recitations, is illustrative of the claimed subject matter:

1. A process for forming a radiused duct, the process comprising:
  - forming a straight section of duct in which an interior passageway of the straight section of duct is free of obstructions;
  - applying heat in excess of 180°F into the interior passageway of the straight section of duct so as to cause the straight section of duct to become pliable, the step of applying heat comprising flowing heated air into one end of the straight section of duct and through the interior passageway of the straight section of duct;
  - forming a fixture having a first flat plate and a second flat plate in fixed spaced relation to each other**, said first and second flat plates defining a channel having a desired radius of the radiused duct, **said first and second flat plates having an**

---

<sup>2</sup> In this Decision, we refer to the Final Office Action dated October 5, 2017 (“Final Act.”), the Appeal Brief filed June 4, 2018 (“Appeal Br.”), and the Examiner’s Answer dated September 4, 2018 (“Ans.”).

**unobstructed opening therebetween at a top of said first and second flat plates**, each of said first and second flat plates being bent into a curved configuration; placing the heated straight section of duct into said fixture between said first and second flat plates; cooling the heated duct in the fixture; and lifting the cooled duct through the unobstructed opening from the channel of said fixture.

Appeal Br. 23 (Claims App.).

### REFERENCES

The Examiner relies upon the prior art below in rejecting the claims on appeal:

Barnett	US 3,753,635	Aug. 21, 1973
Wendorff	US 5,369,973	Dec. 6, 1994
Anzai	US 6,855,287 B1	Feb. 15, 2005
Chu	Kor. Pub. No. 10-2004-0025770	Mar. 26, 2004

### REJECTIONS

The following rejections are before us on appeal:

Rejection 1. Claims 1–3 under 35 U.S.C. § 103 as unpatentable over Anzai in view of Chu and Wendorff. Final Act. 2.

Rejection 2. Claims 11, 13, and 14 under 35 U.S.C. § 103 as unpatentable over Anzai in view of Chu. *Id.* at 5.

Rejection 3. Claim 16 under 35 U.S.C. § 103 as unpatentable over Anzai in view of Chu and Wendorff. *Id.* at 8.

Rejection 4. Claims 1–3, 6, and 7 under 35 U.S.C. § 103 as unpatentable over Barnett in view of Chu, Anzai, and Wendorff. *Id.* at 8.

Rejection 5. Claims 11, 13, 14, 17, and 18 under 35 U.S.C. § 103 as unpatentable over Barnett in view of Chu and Anzai. *Id.* at 12.

Rejection 6. Claim 16 under 35 U.S.C. § 103 as unpatentable over Barnett, Chu, Anzai, and Wendorff. *Id.* at 16.

#### ANALYSIS

We review the appealed rejections for error based upon the issues identified by Appellant and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential), *cited with approval in In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“[I]t has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections.”). After considering the evidence presented in this Appeal and each of Appellant’s arguments, we are not persuaded that Appellant identifies reversible error. Thus, we affirm the Examiner’s rejections for the reasons expressed in the Final Office Action and the Answer. We add the following primarily for emphasis.

Appellant argues rejections 1 and 4 separately but otherwise does not present any substantively distinct arguments for any individual claim. *See* Appeal Br. 15, 18, 21. Therefore, consistent with the provisions of 37 C.F.R. § 41.37(c)(1)(iv) (2013), we limit our discussion to claim 1, and all other claims on appeal stand or fall together with claim 1.

Rejections 1 to 3. The Examiner rejects claims 1–3 under 35 U.S.C. § 103 as unpatentable over Anzai in view of Chu and Wendorff. Final Act. 2. The Examiner applies additional prior art references to claims 11, 13, 14, and 16. *Id.* at 5, 8.

The Examiner finds that Anzai teaches a process of forming a radiused duct where the duct is heated, placed into a fixture “defining a channel having the desired radius of the duct,” cooled, and removed from

the fixture. Final Act. 2–3. The Examiner finds that Anzai “does not teach that the fixture is formed from first and second plates that have been formed and positioned in fixed spaced relation to each other to define the channel having the desired radius of the radiused duct, nor does Anzai explicitly teach lifting the cooled duct from the channel of the fixture through an unobstructed opening between the tops of the first and second plates.” *Id.* at 3. The Examiner finds, however, that Chu teaches a fixture with claim 1’s plates as recited. *Id.* at 3–4 (citing Chu). The Examiner finds that Chu likewise teaches a heated duct in a fixture where the duct is then cooled and removed. *Id.* at 4. The Examiner determines that it would have been obvious to substitute the Anzai fixture with the Chu fixture because doing so would have been simple substitution of a known element for another to obtain predictable results. *Id.* at 4. The Examiner relies on Wendorff to establish that it would have been obvious to use heated air as Anzai’s heated fluid. *Id.* at 4–5 (citing Wendorff).

Appellant argues that the cited art does not teach “an unobstructed opening” as recited in claim 1 because Chu’s “multiple escape prevention bodies (31)” create an obstructed opening between plates. We disagree. The Examiner finds that the Chu fixture provides an unobstructed opening during placement and removal of the duct. Final Act. 3–4; Ans. 3–5. The preponderance of the evidence supports the Examiner’s position. Chu Figures 2 and 4 illustrate that the escape prevention bodies (31) are not attached to the fixture during placement and removal of the duct. The text of Chu (first paragraph of page 4 of the Chu translation of record) expressly indicates that the escape bodies are removed prior to removal of the duct.

Because the preponderance of the evidence supports the Examiner's position, Appellant's argument does not identify reversible error.

Appellant also argues that Anzai lacks "flat plates bent into a curved configuration" and teaches away claim 1's recited "fixed space relation." Appeal Br. 16. These arguments are unpersuasive because the Examiner relies on Chu, not Anzai, as teaching these recitations. Final Act. 3–4. Moreover, we discern no teaching away because Anzai does not criticize, discredit, or discourage Chu's apparatus. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004) ("The prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed in the '198 application.").

Appellant also argues that claim 1 differs from the art because heating occurs prior to placing the duct in a curved fixture for cooling. Appeal Br. 17–18. The Examiner, however, finds that Anzai teaches such a process (Ans. 4), and the preponderance of the evidence supports the Examiner's findings (Anzai 7:63–8:34).

Finally, Appellant argues that a person of skill in the art would not combine the teachings of Chu and Anzai. Appeal Br. 18. The Examiner, however, correctly determines that use of the Chu fixture with Anzai's process would be merely a predictable use of a prior art element for its established function. *KSR Int'l v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

Because Appellant's arguments do not identify reversible error, we sustain the Examiner's rejections.

Rejections 4 to 6. The Examiner rejects claims 1–3, 6, and 7 under

35 U.S.C. § 103 as unpatentable over Barnett in view of Chu, Anzai, and Wendorff. Final Act. 8. The Examiner applies additional prior art references to claims 11, 13, 14, 16, 17, and 18. *Id.* at 12, 16.

The Examiner finds that Barnett teaches, for example, applying heat to a duct, placing the heated duct into a curved fixture, and then cooling the duct. Final Act. 8–9 (citing Barnett). As with Rejection 1, the Examiner finds that Chu teaches a curved fixture for holding a heated duct (as we explain above) and determines that it would have been obvious to use Chu’s fixture with Barnett’s process.

To the extent Appellant raises the arguments we address above (Appeal Br. 20), those arguments are unpersuasive for the reasons explained above.

Appellant argues that Barnett does not have plates in fixed relation to each other as claim 1 recites. Appeal Br. 19–20. This argument is unpersuasive because the Examiner relies on Chu as teaching such plates. Final Act. 9–10.

Appellant also argues that there is no reason to combine the teachings of Barnett and Chu because Chu teaches use of a coil spring within the duct. Appeal Br. 20–21. Appellant’s argument is unpersuasive because the Examiner, however, correctly determines that use of the Chu fixture with Barnett’s process would be merely a predictable use of a prior art element for its established function. Final Act. 9–11; *see also KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). The Examiner is not making use of Chu’s coil in the rejection, and the evidence does not support that the coil is in any way essential to use of Chu’s fixture as the Examiner proposes. Bodily

incorporation of all features of the prior art is not necessary for a proper obviousness rejection:

To justify combining reference teachings in support of a rejection it is not necessary that a device shown in one reference can be physically inserted into the device shown in the other.

*In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Because Appellant’s arguments do not identify reversible error, we sustain the Examiner’s rejections.

DECISION

In summary:

<b>Claims Rejected</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1-3	§ 103 Anzai, Chu, Wendorff	1-3	
11, 13, 14	§ 103 Anzai, Chu	11, 13, 14	
16	§ 103 Anzai, Chu, Wendorff	16	
1-3, 6, 7	§ 103 Barnett, Chu, Anzai, Wendorff	1-3, 6, 7	
11, 13, 14, 17, 18	§ 103 Barnett, Chu, Anzai	11, 13, 14, 17, 18	
16	§ 103 Barnett, Chu, Anzai, Wendorff	16	
<b>Overall Outcome</b>		1-3, 6, 7, 11, 13, 14, and 16-18	

Appeal 2019-000674  
Application 14/274,171

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

AFFIRMED