

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 64

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte CAMPBELL H. STEKETEE, JR.

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Appeal No. 1997-4430  
Application 08/421,463<sup>1</sup>

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HEARD: January 10, 2000

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Before COHEN, STAAB and BAHR, Administrative Patent Judges.

COHEN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 39 through 41 and 60 through 66. Claims 15 through 18 have been

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<sup>1</sup>Application for patent filed April 12, 1995. According to appellant, this application is a continuation of Application 08/010,522, filed January 25, 1993, now abandoned, which is a continuation of Application 07/808,305, filed December 16, 1991, now abandoned, which is a continuation of Application 07/180,904, filed April 13, 1988, now abandoned, which is a continuation-in-part of Application 07/076,973, filed July 28, 1987, now U.S. Patent No. 4,867,921, issued September 19, 1989, which is a continuation of Application 06/846,322, filed March 31, 1986, now abandoned.

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canceled. Claims 1 through 14, 19 through 38, 42 through 59, and 67 through 70, the only other claims remaining in the application, stand withdrawn pursuant to 37 C.F.R. § 1.142(b), as being drawn to a nonelected invention.

Appellant's invention pertains to a replacement pipe product in reduced form for insertion in an existing conduit and to a replacement pipe product for insertion in an existing conduit. An understanding of the invention can be derived from a reading of exemplary claims 39 and 61, copies of which appear in the SUPPLEMENTAL APPENDIX TO APPEAL BRIEF (Paper No. 58).

As evidence of anticipation and obviousness, the examiner relies upon the following documents:

Harper et al. (Harper)	2,794,758	Jun. 4, 1957
Hyodo et al. (Hyodo)	4,723,579	Feb. 9, 1988
Laurent (France) <sup>2</sup>	2,503,622	Oct. 15, 1982

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<sup>2</sup> Our understanding of this document is derived from a reading of a translation thereof prepared in the United States

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The following rejections are before us for review.

Claims 39 through 41 and 60 through 65 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Laurent.

Claims 61 through 64 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Laurent.

Claims 39 through 41 and 65 stand rejected under 35 U.S.C. § 103 as being unpatentable over Laurent in view of Hyodo.

Claim 66 stands rejected under 35 U.S.C. § 103 as being unpatentable over Laurent (as applied to claim 65 in the anticipation rejection, supra) or Laurent in view of Hyodo (as applied to claim 65 immediately above), further in view of Harper.

The full text of the examiner's rejections and response

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Patent and Trademark Office. A copy of the translation is appended to this opinion.

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to the argument presented by appellant appears in the answer (Paper No. 57), while the complete statement of appellant's argument can be found in the brief (Paper No. 55).

In the brief (page 5), appellant groups the claims as follows. The first group includes claims 39 through 41, with claim 40 separately patentable from claim 39. The second group includes claims 61 through 66, with claims 63 through 66 separately patentable from claim 6 (sic, claim 61).

#### OPINION

In reaching our conclusion on the issues raised in this appeal, this panel of the board has carefully considered appellant's specification and claims, the applied references,<sup>3</sup>

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<sup>3</sup>In our evaluation of the applied documents, we have considered all of the disclosure of each reference for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). Additionally, this panel of the board has taken into account not only the specific teachings, but also the inferences which one skilled in the art would reasonably have been expected to draw from the disclosure. See In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

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and the respective viewpoints of appellant and the examiner.  
As a consequence of our review, we make the determinations  
which follow.

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We reverse each of the examiner's rejections of appellant's claims. Our reasoning appears below.

### The Anticipation Rejections

This panel of the board determines that neither independent claim 39, nor independent claim 61, is anticipated by the Laurent disclosure. The same applies of course to the claims respectively dependent therefrom.

In particular, we are of the view that the limitations of claim 39 are not addressed by the tube in the shape of star (Fig. 1C) taught by Laurent. While clearly a deformed tube, the star shape tube of Laurent nevertheless fails to exhibit a flattened and longitudinally folded shape, as does the H and U shapes of the respective embodiments of Figs. 1B and 1D (see translation, page 5). Thus, the star shape of Laurent cannot be fairly said to teach the pipe product of claim 39 that comprises, inter alia, a pipe in reduced form having a flattened and longitudinally folded shape, with the bulbous

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end of a shorter leg nesting behind the bulbous end of a longer leg to minimize the overall thickness of the folded pipe.

As to claim 61, we find that the claimed replacement pipe product is not anticipated by the Laurent teaching. As can be discerned from the Laurent document, an initial cylindrical tube is provided with an elastic memory, which initial tube shape is subsequently returned to or regained from a deformed tube configuration (Figs. 1A, 1B, 1C, and 1D).<sup>4</sup> This is not the replacement tube product of claim 61 which requires a memory for a "reduced non-circular form".

#### The Obviousness Rejections

We reverse the respective rejections of claims 39 through 41 and 65, and claim 66 under 35 U.S.C. § 103, for reasons set forth, infra.

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<sup>4</sup>We note that the teaching of Laurent is somewhat akin to the embodiment of appellant's Figures 1 and 3 wherein a memory exists for a rounded tubular shape.

Claim 39 is drawn to a replacement pipe product and requires, inter alia, a pipe that is substantially rigid at ambient temperature and in a reduced form having a flattened and longitudinally folded shape, with the bulbous end of a shorter leg nesting behind the bulbous end of a longer leg to minimize the overall thickness of the folded pipe. Claim 65 (and claim 66 dependent thereon) recites pipe shape limitations comparable to those set forth in claim 39, and additionally includes the requirement of a memory for a reduced non-circular form, as earlier discussed relative to claim 61.

We note, at this point, that appellant's specification informs us (pages 20 and 21) that the preferred form of folded pipe depicted in Fig. 8 includes the important feature of bulbous fold and leg ends for preventing the folded portions of the pipe from splitting when folded, which might occur with a pipe such as that shown in Fig. 3.<sup>5</sup> The specification (page

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<sup>5</sup>The Fig. 3 embodiment taught by appellant appears to be comparable to the Fig. 1D embodiment of Laurent.

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21) also reveals the importance of the passages 86, 88, and 89 in enabling steam or other hot fluid to pass full-length through the folded pipe for reheating and reworking after the folded pipe is installed.

Turning now to the Laurent and Hyodo references, we are of the opinion that these documents, collectively considered, would not have been suggestive of the subject matter of claims 39 and 65 to one having ordinary skill in the art. We, of course, certainly appreciate some visual similarity between the tubular fabric 5 of Hyodo (Fig. 1) when considered relative to the configuration shown in appellant's Fig. 8. However, the teaching of Hyodo must be considered as a whole in conjunction with the overall disclosure of Laurent. From that perspective, the tubular fabric 5 must fairly be viewed in its proper context, i.e., as a component part, with open holes 9, that acts together with a tubular fabric 2 and a binder 11 to form a lining material 1 for a pipe 10 (Fig. 4), when the composite is turned inside out. As we see it, only reliance upon appellant's own teaching, and not the applied

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art alone, would have provided the essential motivation to configure the distinguishable single article taught by Laurent with the particular shape taken from the tubular fabric 2 of Hyodo. At this point, we particularly note that, even if so modified, the resulting pipe would not be that as claimed since adoption of the shape of the folded tubular fabric 2 of Hyodo with its turnover 8 (Fig. 1) would not effect a configuration of legs nested "to minimize the overall thickness of the folded pipe" (as seen in appellant's Fig. 8), an express requirement of each of claims 39 and 65. Thus, the claimed invention would not have been rendered obvious on the basis of the Laurent and Hyodo disclosures. As to the Harper patent, it is apparent to us that it clearly fails to overcome the noted deficiencies of Laurent and Hyodo.

In summary, this panel of the board has:

reversed the rejection of claims 39 through 41 and 60 through 65 under 35 U.S.C. § 102(b) as being anticipated by Laurent;

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reversed the rejection of claims 61 through 64 under 35 U.S.C. § 102(b) as being anticipated by Laurent;

reversed the rejection of claims 39 through 41 and 65 under 35 U.S.C. § 103 as being unpatentable over Laurent in view of Hyodo; and

reversed the rejection of claim 66 under 35 U.S.C. § 103 as being unpatentable over Laurent (as applied to claim 65 in the anticipation rejection, supra) or Laurent in view of Hyodo (as applied to claim 65 immediately above), further in view of Harper.

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The decision of the examiner is reversed.

REVERSED

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IRWIN CHARLES COHEN	)	)
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
LAWRENCE J. STAAB	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
JENNIFER D. BAHR	)	
Administrative Patent Judge	)	

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